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Addresses.

POVERTY AND DEGENERACY: THEIR CAUSE, PREVENTION AND CURE.*

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CHICAGO.

Members of the American Medical Temperance Association: Though not retaining sufficient physical strength to be with you at your present annual meeting, I nevertheless send you cordial greeting, and ask your patient attention to the following subjects at this beginning of the twentieth century of the Christian era. During the last few months the literature of Christendom, and especially that of our own country, has been filled with eulogistic notices of the remarkable progress made in every department of literature, the sciences, arts, industries, and facilities for intercourse during the century just closed. The general correctness of these eulogistic notices, so far as they relate to discoveries in science and their practical application to improvements in every department of human industry and intercourse, is universally admitted. While it is thus freely admitted that the application of steam and electricity have made neighbors of the most distant nations, and multiplied many times the products of human industry; and the application of the facts and principles of sanitary science, evolved by our own profession, have so far limited the prevalence of epidemics and infectious diseases as to add one-third to the average duration of human life, it is very generally conceded that poverty, imbecility, epilepsy, insanity, criminality, and other diseases of degeneracy have been increasing faster than the increase of populations. So true is this that human degeneracy, both physical and mental, has become a subject of frequent discussions by sociologists, physicians and legislative assemblies, and many remedies have been suggested. As nearly all the writers on the subject allege poverty with its environments and heredity as the chief causes, so all their remedies have for their object the improvement of the first, and the prevention of transmission by the second. We are told to improve the tenement houses and ensure for them more light and air, more cleanliness and ventilation, and already millions of dollars have been expended in such work in the larger cities of this and other countries.

And to prevent the propagation of degenerates hereditarily, we are advised to prohibit by legal enactments the marriage of the feeble-minded, the epileptic and the insane, and to render impotent by surgical operations convicted criminals of both sexes. And some have even suggested that the modern care bestowed upon the defective classes in providing for them hospitals, asylums and charitable support, and for the criminals comparatively comfortable prisons, has been an important cause of their continued increase and corrupting influence upon the body politic. Careful examination will show that nearly all the remedies proposed are aimed at the removal of the effects of degeneracy instead of their causes. It is true that poverty is prone to create an environment of dirty streets; small, overcrowded and ill-ventilated houses, that favors the prevalence of typhoid fever, tuberculosis and other infectious diseases, by which the ratio of mortality is increased. But simple poverty, aided even by dirty and overcrowded tenements, has no more tendency to create either mental or physical degeneracy than do the mansions and palaces filled with all the luxuries of the rich. True degeneracy, whether mental, as manifested by the different grades of mental impairment and disorder; or physical, as seen in defects and deformities of body or limbs, or in simple defective vitality, is the result of causes capable of directly impairing the vital properties of the protoplasm and corpuscular elements of the blood and tissues of which the living body is composed; causes, therefore, that enter into the system and either remain or are repeated daily through considerable periods of time.

Consequently they do not exist in the environments of either poverty or riches. Neither are they to be found as elements of any variety of true food. Simple food, whether solid or liquid, satisfies the appetite in about the same quantity through life; and if too much is taken it produces not degeneracy, but indigestion or other temporary sickness.

There are, however, a large number of well-known substances, which, when taken into the living body in small doses, are neither digested, assimilated or used to repair the natural waste of the tissues, nor to evolve any known natural force or energy, but are soon eliminated through the various secreting or eliminating organs either unchanged or in a state of oxidation. While these substances are in the system they exert a modifying influence on the metabolic processes and functions either of particular organs or of the system as a whole, and consequently are always injurious to persons in health. If given in large doses, or in moderate doses through long periods of time, they cause tissue degenerations or even death. Therefore by chemists and toxicologists they are classed as poisons. But physicians, by using them in small doses and for brief periods of time, can and do avail themselves of their power to modify the vital processes in such manner as to correct morbid conditions of disease, and thereby classify them as medicines. But every intelligent physician knows that if he gives real medicine to persons in good health it only helps to make them sick, in strict accordance with the ancient proverb: "The well need not the physician, but only those who are sick." Clear and definite as are the foregoing distinctions and rela-

* Read at the annual meeting of the American Medical Temperance Association, at St. Paul, June 6, 1901.

134512

tions between food, poisons, and medicines, we are still compelled, even at this commencement of the twentieth century of the Christian era, to witness their confusion and practical intermixture by large portions of both the profession and the community. Thus we see on the dining tables of many in all grades of society, and still more in the social banqueting halls, not only food, but a variety of anesthetic and narcotic substances also, that the chemist calls poisons and the physician calls medicines. The substances thus used all belong to the anesthetic and narcotic classes, as opium, cocain, tobacco, ether and alcohol, all of which when taken internally either by the stomach, lungs, or hypodermically, directly diminish cerebral and nerve sensibility, muscular strength, tissue metabolism, and protoplasmic vitality in the direct proportion to the quantity used. By directly and quickly lessening the cerebral sensibility, which is man's seat of consciousness, they lessen his consciousness of all mental impressions, whether of heat, cold, pain, strength or weakness. And this is the true secret of their deceptive and destructive influence over the human race. While they thus lessen the man's ability to judge correctly, either of his own condition or of the condition of his environment, they are equally retarding and perverting the vital processes of cell growth, nutrition, disintegration and secretion, and if continued for any considerable period of time, inevitably lead to physical and mental degenerations in both parent and offspring. By the people of Asia and the East Indies opium is the chief agent used, while in Europe and America, alcohol and tobacco take precedence in all grades of society. But what is the real difference between the Chinaman's opium siesta, and the European or American's banquet of food and alcoholic drinks in an atmosphere blue with tobaco smoke; or his modern after-dinner "smoker"? As a mode of speedily getting into the land of dreams with the material world shut out, the Chinaman's method is doubtless superior.

However, as a mode of overcoming man's sense of propriety and self-control and of materially depressing all his vital functions without actually destroying his ability to find his way home some time before the next morning, the European and American plan succeeds best. Both are deliberate indulgences in the use of subtle poisons that deteriorate health and morals in direct proportion to the quantity used.

That the daily or habitual use of alcoholic drinks, even in moderate doses, not only impairs both health and morals and leads to slow tissue degenerations, but also so impairs the metabolic and nutritive processes as to render the individual more liable to attacks of all acute infectious diseases, and more liable to die when attacked, has been fully demonstrated not only in the laboratory of the scientists, but also in every field of human labor and in every variety of climate.

The experiments of Doyen, Abbot, Ridge, Verlaguss, Ranelleti, and Goldberg, the annual reports of the registrar-general of Great Britain, and the records of life insurance companies, all prove this so completely as to leave no room for doubt or cavil. And by thus diminishing the vital resistance and promoting tissue degenerations, the alcoholic liquors equally diminish the vitality and promote both the physical and mental degeneration of their children, as was shown in a paper presented to this society, by me, in 1899. Then why longer waste time and money in efforts to renovate the tenements of the poor; in obtaining laws for securing sanitary marriages; and in devising surgical operations for rendering both degenerates and criminals incapable of extending their hereditary influence; and yet leave the causes of seven-tenths of all pauperism, crime and degeneracy that afflict the people of this country and of Europe in the form of alcoholic drinks, tobacco and other narcotic poisons, untouched or even fostered by governments for the sake of the revenue they yield? It is a striking example of economic inconsistency when municipalities and governments issue a license to sell alcoholic liquors and tobacco for a money fee, in aid of the public revenues, when the use of those same articles results in compelling the same municipalities and governments to pay out for the support of the resulting pauperism, insanity, crime and degeneracy ten dollars for every one dollar received as license fee, without counting the $2,000,000,000 paid by the consumers in our country annually without getting in return the value of a loaf of bread or of a shirt to cover their nakedness. It is more than sixty years since my mind was compelled by the inexorable rules of logic, to adopt the conclusion that if alcoholic liquors are legitimate articles of commerce and popular use, the traffic in them should be free to all, rich and poor alike; or if they are really subtle, deceptive and dangerous poisons they should be placed on the statutes of the several states with arsenic, corrosive sublimate, strychnin and other poisons, to be sold and used under the same regulations as the other articles named. It is puerile in the extreme to admit the truth of the ancient proverb that "wine is a mocker, and strong drink is raging, and whosoever is deceived thereby is not wise," and yet talk of both as stimulant, restorative and even nourishing, and to be licensed for general use. It is still more puerile to freely admit the poisonous and destructive influence of alcohol, as it exists in fermented and distilled liquors, and yet for a paltry money bribe for the public conscience, license its general use under the pretense that the influence can not be wholly suppressed, and therefore it is better to *regulate* it by a license. On the same basis licenses should be issued to a sufficient number of men to do all the stealing and murdering according to legal regulation, because both have been continued throughout the history of our race in defiance of the prohibitory laws of both God and man. The paramount question before the intelligent men and women of Christendom to-day, is not one of politics or of political parties or of social classes; but one solely pertaining to public health and morals.

It is, whether alcohol and other well-known narcotic drugs are really wholesome articles of drink or food, safe for general use; or are they absolutely subtle, deceptive and dangerous poisons, stealthily destroying both public health and morals, and constantly multiplying hereditary degenerates in all classes of human society? If the former, they are entitled to the same treatment as other articles of commerce and general use. If the latter, then their regulation belongs exclusively to the police and sanitary authorities, aided by the courts. They can not be both. That the alcohol, as it exists in fermented and distilled liquors, is a positive protoplasmic poison, directly impairing every natural structure and function of the living body in proportion to the quantity used, and the length of time its use is continued, is proved by the results of every experimental investigation concerning it, instituted by eminent scientific men, both in this country and Europe.

Their verdict is abundantly confirmed by the history and condition of the inmates of every asylum for the poor, the feeble-minded, the epileptics, the insane and

134512

the inebriates; those of every reformatory and prison; by the records of every police and criminal court; and by the details of every well-kept registry of vital statistics. As concerns danger to human life, every intelligent reader of the public press knows that the ordinary use of alcoholic liquors by persons claiming to be in health, is the direct cause of more suicides, homicides and murders every month, than is produced by all the other poisons known to toxicologists in a year. Then why not now, at the beginning of this twentieth century of the Christian era, cease calling alcoholic liquors stimulants or restoratives, and not only speak of them as subtle and dangerous poisons in every household, but also concentrate all the facts of science, clinical experience, and of economic and criminal records, in favor of having alcohol and all liquids containing 2 per cent. or more of it, placed on the statutes of the several states along with arsenic, strychnin, etc., to be sold and used under the same regulations and penalties as other poisons dangerous to the public health and morals? If this were accomplished it would soon remove one of the chief corrupting influences from the field of politics, and place it under the domain of the police and health authorities, aided by the courts, where it legitimately belongs. And it would do more to prevent tuberculosis and all forms of human degeneracy than all the other measures combined.

SECTION ON STOMATOLOGY.

ADDRESS OF CHAIRMAN DELIVERED AT THE FIFTY-SECOND ANNUAL MEETING OF THE A. M. A., HELD AT ST. PAUL, MINN., JUNE 4-7, 1901.

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For the second time you have honored me by making me your chairman. I appreciate the courtesy and kindly feeling which has prompted this action, and thank you for it. In reviewing some of the more important matters which have been presented to our profession during the past year, it seems to me that the symposium on dental education presented before this Section at its last meeting is one of considerable importance as an educational factor. The time was ripe for such a discussion, and we are already beginning to see its good results. At the beginning of this twentieth century we find that advanced conditions call for a higher educational and professional standard. Some of our schools are already recognizing this, and have decided that another year should be added to their course of study, making it of four years, and they also have under consideration the requirement of a degree in letters, or its equivalent, for entrance to their schools. Necessity for such action arises from the fact that this is an age of progression; the material development and enterprise of the time is irresistible. The man who would succeed in a profession must now grasp every legitimate opportunity. His equipment should be larger and his education broader than formerly. Success in the future is to come to him who shall be educated to do a thing as well as it is possible to do it; that is, he must become a specialist in some department of his chosen profession. I have been informed that President Eliot, of Harvard University, after reading the symposium on dental education, writes to our Secretary that he is favorable to the establishment of a medical university where all the medical specialties, including dentistry, shall be taught under one head, and that a common degree shall be given to all. President Capen, of Tufts College, writes me under date of February 21, 1901: "I have received your pamphlet containing an account of the proceedings of the Section on Stomatology of the AMERICAN MEDICAL ASSOCIATION. I have read not only your own paper with great interest and profit, but have examined the other papers sufficiently to get the drift of the sentiment of the Association. I was surprised to find it so strongly in accord with my own views. I may add that I find now, both in our medical and dental faculties, an opinion strongly favoring a four years' course for dental students, as well as medical students, and the common degree of M.D. for all.

Some of the criticisms against this common degree come from eminent professors in our special schools, who are earnest, able and conscientious men, sincerely believing that if we are to educate our students in medicine, they will become theorists, as are most of the educated dentists from the schools of Europe; and that the practical technical training, which in the past has made the name of the American dentist honored all over the world, will no longer be acquired; that under this new system American dentists will become thinkers rather than operators, scientists rather than practical men.

Such opinions are to be respected, but, on the other hand, the four years' course could be systematically arranged to give the technical training fully equal to that given to-day in our best special schools, together with the necessary medical education that shall warrant the common degree. We should demand the same medical education that is required in other medical specialties, with all, or more, of the practical training that shall teach the hand as well as the head. Such a system has never yet been tried, but it is reasonable to suppose that two men, being equal otherwise, the one with this advanced education must necessarily be the broader man, and the profession must necessarily be benefited by such a training.

Another subject nearly as important is in relation to the many problems now before our profession, and as to the best methods of solving them. This has recently been considered by the Dental Society of the State of New York, and should receive our cordial coöperation. In considering these problems, will it be wisest to have the individual investigator proceed in his own way, paying his own expenses in solving our problems, or will it be better for national or state societies to establish commissions, whose duty shall be to oversee and encourage research work, propose problems to be worked out, and also have it in their power to furnish the necessary funds for carrying out this work? If such a commission were established, is it not reasonable to suppose that the profession would be greatly benefited, and result in a more uniform practice? Such a commission should be composed, not merely of eminent practitioners, but of men of judicial minds and training, whose duty should be to collect the facts, weigh the evidence, and give rulings on disputed points.

Among the students in our special schools there are always to be found a few who have the inborn faculty of investigation. While building up a practice they give a very considerable amount of time in solving some of the scientific problems which appeal to them. Some of these men become well known to the profession, others do not. There is a very considerable expense attending many of these investigations, and research work would be better done if they could afford suitable apparatus. Work of this nature is of value to the whole profession, and it seems as though it would be wise to establish the

commission suggested. Investigators could then devote a certain portion of time to solving problems, and receiving therefor adequate compensation. Our schools also should encourage research work, and a department for it should be established, where men who are capable should be given the opportunity to work along lines congenial to them. This may lead to a career of much value to themselves and of great good to their profession.

There are one or two important matters which I think would be wise to consider in regard to the subject of State Boards of Dental Examiners, which is to be presented in a series of papers for our consideration and discussion at this session. This subject is an important one, and will, I am sure, receive careful attention in broad and generous criticism. We are all mindful of the fact that in many of the states the Board of Dental Examiners has been largely instrumental in raising the professional standard and of influencing in no small degree the necessity for a higher educational qualification in our special schools. With all this there is yet something to be desired. An appointment to the board should never be a political gift. The nomination of suitable persons to fill vacancies on such a board should be made to the appointing power by nominating committees from the state societies elected for this purpose. This plan works admirably in Massachusetts. A standard should be established by the National Board of Dental Registration for the boards of the different states, that shall make it possible for a person who has once passed a successful examination to practice his profession in any other state, without further examination. And again, in justice to the older members of our profession, discretionary powers should be given the boards of the several states to guide them in granting certificates to those who have for years been active in honorable practice, and who are not, by reason of advancing years, fitted to pass the same examination as should be demanded of recent graduates.

In the department of prophylaxis the future is bright with possibilities. Recent investigation is opening up a field that gives promise soon of successful treatment. J. Leon Williams, in his brilliant paper on "The Bacteria of the Human Mouth," has demonstrated beyond a doubt that there exists upon the teeth of persons predisposed to caries, a hardened gelatinous film, which is a culture medium for the growth of myriads of microorganisms. This film he calls the gelatinous microbic plaque. The organisms found here are largely the leptothrix racemosus, together with the leptothrix buccalis. The leptothrix racemosus is, like the leptothrix buccalis, a thread-like form, but differs in having myriads of spores growing from an extremity, where they multiply with marvelous rapidity. They are benign or malignant, according to their environment, and the saliva in an abnormal condition is the exciting cause of dental caries.

Prof. J. P. Michaels, of Paris, who has given the results of his recent brilliant investigations of human saliva at the International Dental Congress, tells us that, as a result of over-activity of the liver, a superabundance of glycogen may be found in the saliva, giving it an alkaline reaction; but upon coming in contact with the ptyalin, which is always present in the saliva, a reduction occurs of the glycogen, first to glucose and then to lactic acid, which unites with the lime of the tooth. He has experimented with ptyalin and glycogen (either alone giving a neutral solution) and put them in separate bottles containing distilled water, then connected the liquids in the two bottles by a piece of cord, which formed a loop around, and in contact with, a chalk crayon. By capillarity the liquids came together at the chalk, which dissolved away wherever touched by the cord. He asks: "Does not this tend to show how decay of the teeth may occur even in an alkaline saliva, and independent of microbic influences?"

Michaels has also shown that exciting and pathological conditions can be found, and are positively recognizable in the saliva. He has been able to determine the histochemical condition of saliva of those who are not affected with carious teeth, and suggests that nutrition may establish vital conditions so desirable in securing immunity from decay.

A paper of special interest on treatment to prevent the decay of the teeth has been presented by Dr. D. D. Smith, of Philadelphia, and should command our serious attention, when considered from the standpoint of recent investigation. The simple method is to place in a suitable carrier a piece of orange-wood sharpened to a chisel point for using on the flat surfaces of the teeth, and another shaped to a pencil point to be used between them. These points are to be renewed as often as they become frayed. Before using they are dipped in water and then in pumice, and with them the surfaces of the teeth are polished well up into the festooning of the gum, using enough force to stimulate, and cleansing what may appear to be clean teeth, going over all surfaces thoroughly, outside, inside, between, and on the occlusal surfaces. This work should be done as thoroughly as it is possible to do it, leaving the teeth in a polished and smooth condition. Such action has a stimulating influence, and under this stimulation the internal vital function seems roused to new activities. Treatment is to be given once a month, the patients are instructed to thoroughly care for their teeth daily, using fine salt once a week. It produces stimulation of the gum tissue, of the alveolar tissue, and of the whole oral structure. This simple, but vigorous, treatment, by removing the gelatinous microbic plaque which Williams describes, induces the most attractive and apparently most perfect condition of the mouth attainable.

Another subject of particular interest to this body is the law creating a dental service in the United States Army, and enacted by Congress since our last session. Although the law, as enacted, is not all that we asked for, it is an entering wedge which may result in more satisfactory legislation in the future. Dr. Maynard, of Washington, somewhere about the year 1850, was very considerably interested in the enactment of such a law, and used his influence with the President and Secretary of War to have it passed, but without success. In July, 1858, the late Dr. H. J. McKellops, of St. Louis, offered a resolution, with the idea of establishing such a law, before the Western Dental Society, at Quincy, Ill. It may thus be seen that the movement is not a new one, but that, with the growth of public appreciation of dental services, which is justly regarded as one of the common necessities of life, the demand has been created and recognized. Dr. John S. Marshall, of Chicago, one of our most esteemed and valued members, has been appointed President of the Examining Board of Dental Surgeons of the United States Army. He is a man in every way eminently fitted for this position. The high standard which is demanded for the appointment of contract dental surgeons under the new law may be recognized from the fact that out of fourteen candidates only two successfully passed the examinations. Dr. Marshall, in a communication, says: "It is to be hoped, therefore, that our dental schools will not recommend

any young men to come before this board who are not thoroughly well qualified, theoretically and practically, in all the branches comprising the curriculum of our best dental schools."

In the department of biology, science has made some of her most remarkable advances. The work of the investigator has opened up new vistas of relations, of which many of us have never dreamed. In an article entitled "Aspects of Recent Biological Research," recently published in the International Monthly, from which my allotted time will allow only the very briefest quotations, Prof. E. B. Wilson, of Columbia University, says: "Chemical analysis proves that protoplasm is not a single chemical substance, but a highly complex mixture of many highly complex organic compounds, which undergo continual chemical transformations—indeed, a living cell is doubtless the area of the most complex chemical operations taking place in nature. . . . . In the fertilization of the egg, a single cell derived from the father (the spermatozoön) unites with a single cell (the egg) derived from the mother, while the paternal nucleus unites with the maternal. By continued division of the single cell thus formed, arise all the cells of the body. If now we examine the details of this process, we find one remarkable difference between the egg and spermatozoön, namely, that while the two contribute equally to the nucleus of the fertilized germ, the whole, or very nearly the whole, of the remaining cell substance (protoplasm) is supplied by the egg. We have thus a substantial basis for the conclusion that the protoplasm of the embryo is derived wholly or mainly from the mother, while the nuclei are equally divided from both parents. If this result be placed beside those derived from microscopical vivisection, we gain for the first time a clear, if superficial, view of the mechanism of inheritance, and can form a definite mental picture of the manner in which it is effected. As the paternal and maternal nuclei approach each other within the egg, each undergoes a complicated metamorphosis, and finally resolves itself into a number of rod-like or worm-like bodies known as chromosomes, which are exactly equal in number and similar in form in the two. At this period, therefore, the egg no longer contains two nuclei, but in their place two precisely similar groups of chromosomes, which are respectively paternal and maternal in origin. As the egg undergoes its first division to form the first two cells of the embryo, every chromosome in each group splits lengthwise into two exactly similar halves, which separate and pass, one to each of the daughter cells. Each of the latter, therefore, receives two similar groups of daughter chromosomes, paternal and maternal, which are exactly reduplicated in the other cells; and from these two groups, in each cell is built up a daughter nucleus, shown by its mode of origin to be equally derived from both parents. At the second division, the chromosomes reappear, again split lengthwise, and the halves are again equally distributed to the daughter nuclei, and so on throughout the entire life of the animal."

Among other facts noted in this article by Prof. Wilson is the following: "The egg may be fertilized by chemical stimulus, without participation of the male element. If, for example, the eggs of sea-urchins be allowed to develop in sea water containing a very slight excess of potassic chlorid, the development of the embryo is greatly altered, no skeleton is formed, and a larva results which, though living and vigorous, is of widely different form from the normal ones. If, in place of potassic chlorid, lithium chlorid be added to the water, the changes are still more remarkable, the embryo never infolding the cells which normally give rise to the alimentary canal, but developing, as it were, inside out. These monstrous forms are, of course, incapable of nourishing themselves, and ultimately perish; but the result is of high interest, as opening the possibility of creating wholly new organic forms by varying slightly the conditions of development. . . . Certainly new growths of the highest interest, relating to the chemical conditions in the living matter, may be looked for along the lines of research thus opened. . . . Experiments on insects, frogs, and rotifers have already given good ground for the conclusion that sex is in these cases determined by conditions of nutrition, which again in the long run are reducible to chemical conditions. The possibility is thus opened that we may yet succeed, not only in fertilizing the egg by chemical means, but also in rendering the organism male or female, by analogous methods."

In closing, I regret that I have not been able to offer any research work, and that the time allotted for this address will not permit the review of many important papers offered to the profession during the last year. I would suggest that the leading symposium for our next year's session be "Prophylaxis." Our section is well fitted to consider this subject, and the recent investigations should stimulate us to earnest and serious work.

Original Articles.

THE APPOINTMENT OF STATE BOARDS OF MEDICAL AND DENTAL EXAMINERS.*

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Not many years ago it seemed to the majority, as it now seems to some of those interested in the advancement of medical and dental education, that diplomas from chartered colleges or schools gave sufficient assurance that their possessors were qualified to practice in the general or special fields of medicine in which degrees had been conferred upon them, and that the diplomas granted served as an adequate standard for license. This view assumed that instruction in such schools was faithfully given, by competent teachers, during a period of sufficient length to qualify students for the commencement of their careers, and also assumed that diplomas were conferred only upon those who, at the completion of such a period of study, had demonstrated, upon examination, their qualifications. It also assumed that charters would not be recklessly granted to professional schools, and that such charters would be revoked upon proof of their abuse. Experience has demonstrated the fallaciousness of such assumptions. Legislatures have passed incorporating acts most improvidently. So-called colleges have been created at the solicitation of charlatans having no other purpose in view than the manufacture and sale of parchments conferring degrees *in absentia*, without any safeguard or state supervision. The Buchanan and Delavan diplomas are fair types of the product of these factories, which became a stench in the nostrils of decent men.

An attempt was made to remedy this evil, so far as it affected medical license in the State of New York, by a provision requiring that diplomas granted outside

* Read in the Section on Stomatology, at the Fifty-second Annual Meeting of the American Medical Association, held at St. Paul, Minn., June 4-7, 1901.

the state should be endorsed by our own schools. But this plan proved of little avail. Not only did respectable colleges endorse fraudulent and valueless papers, but the diploma business was carried on by certain of our native corporations.

It therefore became necessary to do away altogether with the diploma standard, for the reason that it could not be higher than that of the poorest institution authorized to confer a degree.

The plan of creating State Examination Boards, with power to supervise licenses, next suggested itself. Today such boards exist in nearly all of the states and territories, but with varying powers and standards, which will be found set forth in detail in the carefully prepared bulletins issued by the University of the State of New York, and in the publications of the National Bureau of Education.

At the commencement of the experiment it seemed to those resorting to the plan that to empower these boards to list the "reputable" schools and to accord to their diplomas only the licensing power, would meet the needs of the situation. In many jurisdictions such listing is still the chief function of the state board, and diplomas of the colleges classified as reputable afford therein a license to practice. But this plan has not proved successful, and the refusal of state boards to list certain of the so-called colleges has given rise to no small amount of litigation, especially in the West, where the right of a state board to exclude graduates of schools refused listing by the board has been vigorously attacked in mandamus proceedings.

In twenty-three states, however, the diplomas of even the best schools no longer afford a license to those upon whom they are conferred, but only serve as one of the qualifications of candidates for examination before state boards. This separation of the licensing power from the diploma has proved beneficial to the really reputable schools, some of whom strenuously opposed it. When the diploma constituted a license, faculties seem to have been swayed, insensibly perhaps, by a feeling that the payment of fees on the part of a student, especially if he were somewhat diligent, established a contract right on his part to receive collegiate authority to practice upon the public, and, as a consequence, the standard of education was low, compared with the standard of today. With the abolition of this right to license, which was an apparent, not a real, privilege, the value of a diploma was presently perceived to be proportionate to the reputation of the institution conferring it, which, in turn, was incited by self-interest as well as love of scholarship, to raise its standard and confer its degree only upon those earning it. The period of study has been extended, and if the medical and dental laws have accomplished no other result than the raising of college standards, they find in that alone their ample justification.

The examination of candidates for license being vested in a state board, it is of the first importance that such a body should be properly constituted. In the first place, it goes without saying that its members should not only be honest and competent, but independent of extraneous influences, and with eyes single to the performance of their sole duty, namely, the admission to the profession of men competent to practice, and the exclusion of incompetents from its ranks. In order to command respect and authority, it is equally clear that the board should be composed of men of standing in the community and in their profession. Its members should be abreast of the science of the day in its application to their calling, for the rule of liability in malpractice cases takes into consideration the advanced state of science. Without being identified with teaching bodies, these examiners should be conversant with the arts of instruction and examination, able to frame questions of a nature to elicit the candidate's knowledge, and ascertain his ability to apply it. Unless the minds of the examiners and of the examined meet; unless each understands the other's aim, examinations are fruitless, impediments rather than aids.

Again, the office of examiner should be, and is, when proper tests are regarded in filling it, a post of honor. For that very reason, it should never be filled by one whose appointment is not made because of his competency to perform the duty with which he is to be charged, but for the sake of conferring honor upon the incumbent. It is but natural that the post should be sought for the honor it confers, and yet a conscientious man, apprehending and purposing to perform faithfully its duties, will be slow to seek it. The position of an examiner upon a negligent or incompetent board is the reverse of honorable, and no man of professional pride and standing would suffer himself to be appointed to such a body.

Unhappily, there have been instances of late—let us be thankful that they did not occur, and could not have occurred under the system adopted in the State of New York—of the appointment for personal and political reasons of conspicuously unfit boards. These appointments have been made through the heads of political divisions of the country, and it is but fair to presume that the successful candidates sought the places rather through political influence than by demonstration of their own fitness.

In our State of New York such scandals are not possible. I do not say this to praise our own state board, or to claim for it especial excellence on account of the individuals who compose it. To do so would merely be an exhibition of bad taste, and I certainly have no desire to underestimate the many excellent, able and learned men who honor the examining boards of other states. But what I mean to say is, that those very men are wronged and handicapped when the appointing power, for political reasons, associates them with men of lesser qualifications, and this is what has happened elsewhere, but can not happen in the State of New York, for the following reasons.

The University of the State of New York is not a teaching body, nor yet a political body, but is created for purposes of examination and supervision. It has been assailed and criticized from time to time by politicians who would abolish it, and thereby make way for some substitute which would afford patronage, through themselves. Fortunately, such efforts have hitherto failed, and whatever other criticism may have been made upon the Board of Regents, we have yet to hear any one suggest that its actions have been animated by political or partisan motives.

I sincerely hope that the day is not far distant when each state will have a board of regents, possessing the powers of the Regents of the University of the State of New York, or, as suggested by President Henry Wade Rogers, that "there should be established in each state a council of education, which should be invested with powers similar to those of the Regents of the University of the State of New York, and it should be composed of the most eminent men of the state, without any reference to political considerations. No degree-conferring

power or no degree-conferring institution should be incorporated without the approval of the Council of Education."

If such a condition could be made National there would be no further cause for criticism by foreign nations, who now claim that the degree-conferring power in America is without proper supervision.

With the University lies the power of appointing our boards of medical and dental examiners, from candidates nominated by the state societies. The dental board is divided into four classes, the term of one class expiring on July 31 in each year. Prior to the second Tuesday in June of each year, the state society is empowered to nominate from its membership twice as many candidates for filling vacancies to occur on the board as there shall be such vacancies, and from these nominees the regents appoint.

Thus it is sought not only to remove the constitution of our examining board from state politics, but to take it out of professional politics. The state society, the purpose of whose incorporation is to assemble together men to whom the interest of the profession, its advancement and honor are dear, and membership in which is open to all who are of good standing in the profession and chosen from their districts as representative men, has power to say to the regents: "We submit to you the following names of men who, in the opinion of the dental profession throughout the state, are fit and worthy to represent it. But we can not appoint, we can not by intrigue constitute the board; that must be done by the regents, and with them rests the responsibility for ill-advised selection, limited only by our responsibility in submitting poor material for their choice." Thus there is a double responsibility created; we are responsible for our nominees, and the regents for their appointments, and thus it is that we have removed, so far as human ingenuity could do so, the constitution of our board from the hands of the politicians; and, if I have spoken of our system of licensing dentists as good, I have still spoken less strongly than Dr. Allen, secretary of the advisory committee of the National Association of Dental Faculties, who, writing under date of Nov. 15, 1899, for "A Comprehensive Report from the New York Examiners," was kind enough to say of the body to which he belonged, "the entire committee regard the New York Dental Law as the best in the country."[1]

Before the board thus constituted come the candidates for license, after satisfying the board of regents that they have been graduated from the professional schools after receiving the proper preliminary education. But the examiners do not know the candidates who appear before them or the schools from which they come. To guard against any possible favoritism candidates are examined by number, and it has even happened that men have appeared before the board who have slipped by the outposts and have passed the professional examination without having satisfied the preliminary requirements, with the result that their success in passing the state board has yet failed to license them to practice within the State of New York, by reason of their failure to comply with the preliminary requirements.

The success of our system, therefore, depends upon the existence in the State of New York of our University, which, while controlling all educating bodies, does not itself possess a teaching faculty; thereby have we been able to keep our board out of politics and have been able to create a double responsibility for its appointments.

1. Regents' Bulletin 9, February, 1900, Dentistry, p. 751, Note.

That we have excluded from the profession all incompetents would be claiming to be something more than human; what we can safely maintain, however, is that we have guarded the entrance to the profession, not only with sentinels, but with watchmen over the sentinels.

REVENUE FOR CONDUCTING THE WORK OF STATE BOARDS OF DENTAL EXAMINERS.*

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In this "Symposium on State Boards of Dental Examiners in Their Relations to the Profession and the Colleges," I am asked to deal simply with the subdivision: How Shall the Revenue for Conducting the Work of the Boards of Examiners Be Obtained? 1. By taxation of the people? 2. By fees from the candidates? 3. By taxation of the profession?

Naturally our first inquiry would be as to the causes bringing about dental legislation, and the purpose of such laws.

The majority of the dental world labor under the idea that these dental laws were passed to protect the dentist from the dentist; that is, to bar out the dental parlor man and admit to practice only those who will live up to the code of ethics, but notwithstanding the fact that more or less selfishness on the part of the dental profession prompted their advocacy of such enactments, the laws are for the safety and welfare of the people. This being the case, you say, let the people pay.

No doubt there are many good reasons why the people should pay; for example, were the people taxed, then many worthy, but financially embarrassed young candidates, who have expended at college their last hard-earned dollar, would not be required to wait until they could earn enough to satisfy the demands of the state boards, although I think all candidates would be better off if they would serve as assistants with some successful practitioner. There they would gain experience, not only in the manipulation necessary to the care of the dental organs, but learn, what is vastly of more importance to them at the outset, how to deal with people and to meet the many petty but important details of daily routine in a successful professional office. Were there no other objection to the people being taxed and the state paying these expenses, the fact confronts us that in most states it would be impossible to obtain adequate legislation for such expenditure, from the fact that the average legislator, on account of his peculiar ideas concerning false economy, in appropriating state funds, would never vote for such expenditure, when he was confronted with the fact that in every other walk of life he who dances pays the fiddler. It would be waste of time to deal further with Subdivision 1.

Let us leave Subdivision 2, "fees from the candidate," while we quickly dispose of Subdivision 3, "taxation of the profession."

In our professional ranks there are many generous, whole-souled, self-sacrificing men, but when we talk of securing the revenue by taxing the profession it means the whole profession, and judging from my own experience with the average dentist it would be a greater task to get the dental profession to allow itself to be taxed, so that other dentists might enter into competition with them, than it would be to get the people, the

* Read in the Section on Stomatology, at the Fifty-second Annual Meeting of the American Medical Association, held at St. Paul, Minn., June 4-7, 1901.

free and enlightened voter, to submit to taxation in order that another voter might carry on his business.

This brings us to the only other source of revenue, 2, "the candidate."

When I was requested to prepare this paper there came upon me a sudden elation, for it seemed that for once I knew where to go for the desired information.

In a chat with a lawyer along the lines of dental legislation, he gave me the impression that the state should pay the costs of examination, but alas, when I hastened to him, note-book in hand, I found that I had misunderstood his remarks. Our talk had been of a certain retroactive clause in a proposed dental bill, and that which he had intended to say was, that if this bill should pass it would be a hardship to compel certain ones to pay a second fee, and in justice the state in this case should be responsible.

Continuing the conversation after I had stated the question I was to deal with, the attorney assured me that so far as he was informed of the various license-granting powers, there could be but one answer to the question. Later investigation has convinced me of the soundness of his opinion.

In the work of various other boards, for example, health, forestry, and fisheries, the expenses justly come from the public funds, as the benefit is not for individuals, but for the people; but in the case of a license to carry on some trade or profession, whereby an individual is allowed certain privileges, the individual should pay the costs, notwithstanding the fact that the laws governing such cases are enacted for public protection.

Let us glance for a moment along the various walks in life where licenses are required before one can enter the ranks, and see by actual reference to a few state laws, from what source the revenue is obtained: Georgia, state board of embalmers, license $5, from the candidate; Ohio, physicians, dentists and druggists, fee $25, from the candidate; South Carolina, homeopathic board, fee $5, from the candidate; New Hampshire, plumbers, fee $1, for examination, 50 cents every year, from the candidate; Virginia, medicine and surgery, fee $10, from the candidate; Nebraska, barbers, examination $1, and annually $1, from the candidate; Michigan, barbers, examination $5, and annually 50 cents, from the candidate; barbers in business at passage of law, $1, and annually 50 cents, from the candidate; Tennessee, osteopathy, fee from candidate for recording diploma from one named college, $1, and all not so recorded, fine $100.

This list could be continued indefinitely, and would still have the refrain, "from the candidate."

"Where the successful prosecution of a calling requires a certain amount of technical knowledge and professional skill, and the lack of them in the practitioner will result in material damage to the one who employs him, it is a legitimate exercise of police power to prohibit any one from engaging in the calling who has not previously been examined by the lawfully constituted authority and received a certificate in testimony of his qualification to practice the profession." "It is the common custom in all the towns and cities of the United States to require the payment of a certain sum of money as a license fee, for the privilege of prosecuting one's profession or calling. The license is required indiscriminately of all kinds of occupations, whatever may be their character, whether harmful or innocent, whether the license is required for the protection of the public or not. . . . It is either a license, strictly so-called, imposed in the exercise of the ordinary police power of the state, or it is a tax laid in the exercise of the power of taxation. In many cases it becomes exceedingly important to determine under which power the particular license is imposed. For example, if the license is a tax, the bill must originate in the House of Representatives, according to the almost universal requirements of constitutional law. But if it is a police regulation, the bill providing for it is constitutional in whichever house it was introduced." "It is one of the 'ways and means' of defraying current expenses."[1] A license tax has been held to be reasonable when imposed upon vendors of milk, hucksters, pedlars, vendors of cigarrettes, upon attorneys, physicians, bankers, hacks and drays and other vehicles. So likewise may such tax be exacted of keepers of places of amusement, of dealers in second-hand articles, pawnshops, insurance brokers, auctioneers. In short, the state has the power to impose a license fee as a tax or a police license upon every kind of business.

"In the regulation of all such occupations, it is constitutional to require those who apply for a license to pay a reasonable sum to defray the expenses of issuing the license, and what is a reasonable sum must be determined by the facts in the case."

"When a municipal corporation is given the power to license useful trades or occupations, it can not use the license as a tax to raise revenue, nor is it authorized to entirely prohibit the exercise of the trade or occupation by any excessive license fee."[2] Mr. Justice Manning says:

"A proper license tax is not a tax at all within the meaning of the Constitution or even within the ordinary signification of the word, tax. . . . The imposition of a license tax is in the nature of the sale of a benefit, or privilege to the party who would not otherwise be entitled to the same. The imposition of an ordinary tax is in the nature of the requisition of a contribution from that which the party taxed already rightfully possesses."

I have examined all state laws concerning dentistry, numerous other laws and legal authorities, and so far I have not succeeded in finding a single case where the costs did not fall upon the applicant, therefore in answer to the query: How shall the revenue for conducting the work of the state boards be obtained? I reply: From the candidate.

REVENUE FOR CONDUCTING THE WORK OF BOARDS OF DENTAL EXAMINERS.*

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BY TAXATION OF THE PEOPLE.

Although one of the main objects of examining persons wishing to commence the practice is to secure protection for the people from inferior dental service, and it would seem for such immunity the people should be taxed as they are for any other protection which the law affords. This is doubtless the correct principle, as the members of the state boards are state officers, it would seem most rational that they should be paid as other state officers.

But there would be great difficulty in influencing legislation, as any proposed enactment relating to dental surgery or any branch of medicine, which carried with it a draft upon the treasury of a state, would excite the

1. Tiedeman's Police Regulation of Skilled Trades and Professions.
2. American and English Encyclopedia of Law.

* Read in the Section on Stomatology, at the Fifty-second Annual Meeting of the American Medical Association, held at St. Paul, Minn., June 4-7, 1901.

opposition of the average legislator. It would not be expedient to ask this, as it would be fatal to any further amendment to our present dental laws. In fact, in some of the states, it is specially provided that under no circumstances shall these dental enactments be of any expense to the state.

BY FEES FROM THE EXAMINATION OF CANDIDATES.

All things considered, the most satisfactory plan of securing compensation for the service rendered by members of the state examining boards should be derived from the fees received from the applicants for license. All legislation prescribing and controlling the standard of qualifications of licentiates in dental surgery has been effected through the influence of state dental societies, and every one will concede that such enactments are of great benefit not only to the public but to all reputable practitioners in maintaining a higher standard of professional attainments, which gives more dignity and a higher consideration among the other professions as well as the public.

It is for these reasons, to a great extent, that it is most earnestly desired that the incompetent and unworthy should be excluded from the practice.

The amount of compensation should be to some extent commensurate with a reasonable expectation of income to be derived from these fees. Of course, in some states it would be larger than in others, but a per diem of $10 or $15 and 3 cents mileage would not be extravagant remuneration for members of examining boards, except the secretary, who should be paid $25 per annum additional.

If these and such other legitimate expenses should aggregate less than the amount of fees received, the balance should be turned over to the state society for conducting scientific research or other educational purposes. If these amounts should aggregate more than the fees, then the state society should supply the deficit. It should not be asked of any competent practitioner to attend these meetings and make these examinations for less compensation than the amount mentioned.

In addition to these duties, each member must prepare suitable question lists before the meeting and examine the replies after, in order to give the proper grading to each applicant examined, and both of these require the exercise of much thought and judgment.

BY TAXATION OF THE PROFESSION.

If this should be necessary, then the profession should not hesitate to bear that burden for the sake of the benefit which is derived from a proper discrimination between the worthy and qualified and the unworthy and incompetent; and in order to prevent the lowering of the standards of professional equipment and to provide against the advent of those who pursue the calling as a hustling business rather than a learned and dignified profession.

Hydrotherapy Without Water or Cold.—Winternitz, the professor of hydrotherapy at Vienna, states that in the local application of alcohol compresses we have an effective hydrotherapy without water and without cold. First introduced by Salzwedel for phlegmonous inflammations of the skin, Winternitz has found them extremely beneficial in herpes zoster, in the gangrenous as well as the hemorrhagic form. The pain vanishes almost immediately after the application of the alcohol, and the process arrested and cured. The compress is made of six to eight layers of absorbent gauze dipped in 65 per cent. alcohol, covered air tight and left for twenty-four hours.

THE DENTAL COLLEGE STANDARD.*

1. IS IT WHAT IT SHOULD BE? 2. IF NOT, WHAT IMPROVEMENTS SHOULD BE MADE? 3. HOW MAY THE REQUIREMENTS BE IMPROVED?

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In order to intelligently consider the subject in hand it will be well to first define, if possible, what is the dental college educational standard as at present accepted in this country.

Much agitation and discussion of the subject has for the past two or three years occupied the attention of the journals and the various dental societies, from the national bodies down to the smaller local organizations, as to what the standard should be, but the average practitioner would be at a loss to define what the present situation is if asked to do so. The fact is the whole matter is in a state of evolution just now, the general trend and consensus of opinion seeming to be that high school graduation is the probable goal within the next few years. The fact also is that until 1899 there never was any established standard in this country, each school being a law unto itself as to whom it should matriculate and graduate. The National Examiners sought for years to induce National Faculties to establish a minimum standard as a basis from which to go forward, but it was not until an open rupture, based on a standard demanded by the Examiners as a criterion of reputability and recommendation of schools to the various boards, brought the two national bodies together at Niagara Falls in 1899 in a conference which resulted in the following code of rules being placed on the records of the Faculties Association:

"The minimum preliminary educational requirement of colleges of the association for the session of 1899-1900, shall be a certificate of entrance into the second year of a high school, or its equivalent, the preliminary examination to be placed in the hands of any state or county superintendent of public instruction."

Amended Rule VIII. National Association Dental Examiners, Sec. 2.—"The following preliminary examination shall be required of students seeking admission to colleges recommended by this association: The minimum preliminary educational requirements of colleges of this association for the session of 1900-1901 shall be certificate of entrance in the second year of a high school, or its equivalent; the preliminary examination to be placed in the hands of the State Superintendent of Public Instruction, as adopted by the State Board of Missouri."

Also, "the minimum preliminary educational requirement of the colleges of this Association, beginning with the session of the year 1902-1903, shall be a certificate of entrance into the third year of high school, or its equivalent. The preliminary examination to be placed in the hands of the State Superintendent of Public Instruction. Nothing in this rule shall be construed to interfere with colleges of this association that are able to maintain a higher standard of preliminary education."

The above represents the exact situation at this time, to-wit: present standard, one year of high school, promised standard for 1902, two years of high school, with the agreement between the two bodies that all schools

* Read in the Section on Stomatology, at the Fifty-second Annual Meeting of the American Medical Association, held at St. Paul, Minn., June 4-7, 1901.

belonging to the National Association of Dental Faculties and living up to its standards and requirements as laid down, shall be accepted as reputable by the examiners and recommended to the various state boards for recognition. The regents of Michigan, under the advice of the venerable dean, Jonathan Taft (to whom be all honor), took the initiative in setting the pace and required high school graduation for 1900. The regents of New York will, in 1902, culminate a progressive advance in requirements to full high school standard. At the World's Dental Congress in Paris last summer high school graduation was made the international standard for entering dental colleges. So it would seem quite certain that, viewed at large, high school graduation is accepted as our *Ultima Thule.*

The National Association of Dental Faculties is a body composed of the membership of 51 dental schools, all of which accept and agree to conform to the regulations and rules formulated by that body in the conduct of their schools. However much these schools may vary in their equipment, faculty and general effectiveness as educational institutions, yet, as long as they retain membership in that body, all, by special agreement with the examiners, command the same privileges and recognition, subject to the various dental laws in nearly all the states—membership in that body now being accepted by all state boards as the criterion of reputability before the law. This association, backed at all times by the National Association of Dental Examiners in its every forward move, has in the eighteen years of its existence wrought wonders in the development and unification of curricula, the evolution of dental technics, lengthening course of study and special training, and in a hundred ways making the advantages offered for obtaining a complete dental education and equipment almost ideal; so that the student who comes to the dental college to-day prepared and fitted to assimilate and appropriate what may be his own for the mere taking—has no excuse for leaving school unprepared to enter successfully on the practice of dentistry.

The code of rules and standing resolutions formulated by this association for the government of its members in the conduct of their schools is a monument of sense, wisdom and ethics which would redound to the credit of any deliberative body of men having the interest of their calling at heart—and yet strange to say, never, through all the years of its existence has it seemed to occur to it to effectively inaugurate and establish any given educational preparation as a minimum standard requirement for entering the dental college course—until the regulation of one year of high school above quoted was adopted, and that only after the demonstration of much friction on the subject between the examiners and faculties. The query arises naturally why this important subject was so long ignored. But one logical answer suggests itself, namely: The different schools, or at least a majority of them, preferred to retain in their own hands the decision, without dictation from any source, as to the fitness of an applicant for matriculation. This power of discretion was safely lodged in schools that were state institutions with equipment and financial resource sufficient to meet all current expenses and salaries, regardless of the number of students matriculating—and those with assured attendance large enough to leave out any temptation to admit applicants for financial reasons only. But only a small proportion of the schools have been thus situated. Indeed, most of them must have a given number of students to keep them from bankruptcy, and so at least there was a door of temptation open for the acceptance of credentials that ought to have been better than they often were. In fact at Niagara in 1899 the chief argument used by college representatives against the fixing of the two-year high school minimum requirement was that it would prove the financial ruin of one-half the schools of this country. But what is the fact? Since the first bar was put up the attendance in dental schools has not only diminished but has increased—at least in all the better equipped schools. The experience of the Medical Department of Johns Hopkins is a great object lesson in this regard. Some years ago, because of the increasing size of its classes, and in the hope of restricting them, the entrance requirement was raised first to high school graduation, and then to the possession of an academic degree, all of which only served to increase the number of applicants for matriculation—thus proving a well-known axiom, that the more highly one holds his wares the more eagerly they are sought.

There is probably no doubt that if the higher standard could be successfully inaugurated and established it would work a very marked improvement in the quality of student material entering our schools, a consummation, from the standpoint of us all, most "devoutly to be wished."

The capacity, education, fitness, integrity and even general intelligence of the average examiner, so glibly and frequently brought into question in our current literature, may be far from ideal, and yet, even he is often startled into protest against much of the graduated product that has been sent out from many of our schools in the past few years.

Accepting, from what appears to be the inevitable tendency of events, the high school graduation standard as a condition to be desired, the question at once presents: How can it be inaugurated without working injury to the college interest? The answer is that the colleges, by joining forces with the boards whose duty it is to enforce the dental laws, can at once establish and maintain, without friction or disturbance to the interest of all concerned, an immediate advance of matriculation standards to high school graduation. This as a general proposition will stand.

However doubtful may be the comparative power and strength, legally and morally, of the faculties and examiners when at variance with each other, there is nevertheless no limit to their power and ability to maintain any given standard of educational requirement within reason—as a basis of accepted reputability before the public—made and provided these two representative forces agree to work honestly together to that end. This fact has been lost sight of too long by the colleges. No matter if the appointment of examiners is dominated by political pulls, or if many of their men are incompetent, dull-headed and far from fit representatives of our ideals (as has often been charged), still it must be always remembered that these men represent and are entrusted with the administration of the law, and the law always dignifies its chosen administrators. No matter if the many state laws bear evidence of weakness and inefficiency and are apparently at great variance with each other in their provisions and standards, if scrutinized carefully they will all be found to demand that colleges shall be reputable. This one feature of uniformity in ethics makes it possible for the teachers and examiners, backed by the moral support of the profession at large, to establish and maintain in every state of the Union

any educational as well as ethical standards on which they are agreed to be of one mind.

While the Faculties Association's rules give the individual college absolute control over the behavior, standing, advancement and transfer of the entered students —thus making it impossible for one of them who has fallen short of passing muster in one college to be admitted to another school without the full consent of his alma mater—while, I say, all this obtains after a student has matriculated and been given standing, there is at present nothing to absolutely prevent a man whose credentials have been refused by one school, bobbing up serenely before the dean of another school, and having standing given him on the same credentials. This commercial and competitive temptation, which is the chief obstacle in the way of successfully establishing a uniform advanced standard requirement, can easily and only be overcome by such wise and careful legislation on the part of the Faculties Association as has distinguished it in handling many other no less delicate questions. In the many discussions of this subject of preliminary education the argument has been made, and stoutly supported by facts, that a large number of the most eminently successful of our professions are men who had practically no educational opportunities before embarking on a professional career, and, therefore, that to set a fixed and arbitrary standard would in effect often bar out those who might become, with opportunity, shining lights. Of course, all will admit that such men would be much better equipped with proper educational preparation, and indeed for such very good reason every fixed standard that has been agreed upon or that is contemplated for the future, is modified by the words, "or its equivalent," to give the aspiring student his chance—no matter if his educational opportunities have been curtailed by environment.

How shall a fair, honest judgment as to what constitutes the equivalent of any given standard be secured, and who shall pass such judgment? On this question being properly answered hinges the successful establishment of any prerequisite standard. All will admit that however well equipped a man may be as instructor in any branch of dental education, yet, by that very fact, he is sure to be at least rusty and out of practice on public school examinations, and certainly the college teacher will admit that the politically appointed examiner is likely to be fully as unfitted as himself. Did you ever have opportunity to examine a bunch of material filed with a college dean, called matriculation credentials? It is a startling object lesson, and a few samples will exemplify the plausible expedients resorted to (and, it is to be feared, too often successfully) by men wholly unqualified to meet the published standards of the schools they wish to enter. Ambiguous letters from interested teachers and complacent county superintendents, carefully framed to seem to cover the standard demanded, but really as untruthful as the serpent's reply to Mother Eve, "Yea, hath God said."

Mind, the new Rule VIII, jointly adopted at Niagara in 1899, provides thus: "The preliminary examination to be placed in the hands of the State Superintendent of Public Instruction, as adopted by the State Board of Missouri." Manifestly—since it is not to be presumed that the dental profession has the power to prescribe special duties for any state officer—the intention and expectation was that the State Superintendent of Public Instruction for each state having dental schools should be requested to select and appoint some person specially fitted, in his judgment, to pass upon credentials and properly conduct the preliminary examinations of intending dental matriculants in the colleges of that state. Of course the State Superintendent is a "political creation," but his special appointee for this particular work may practically be satisfactorily agreed upon between the college and the state board. Thus would the college dean be relieved from the ever-perplexing responsibility of passing upon all sorts of so-called credentials, such as every dean has presented to him—credentials many of them so plausible as to easily pass muster if only casually scanned, and which the dean feels certain, should he refuse them, would be cheerfully accepted, along with the student and the fee, by another dean somewhere.

Eliminate all this. Make it absolutely impossible that a matriculant can be given standing in any college on credentials, until these credentials shall have been passed upon, 1, by the accredited representative of the State Superintendent, and then, finally, accepted or rejected by the joint conference committee of college and board. Make their decision, in the interstate and intercollegiate sense, final, and add, if you choose, a reasonable probationary clause providing the applicant a way to make up his shortcomings without abandoning the study of dentistry. In other words, make the general rule jointly accepted at Niagara, practically effective and universal by the two National bodies formulating specific rules for its application in every state, territory and district where a dental school exists. This plan has been successfully operated in more than one state and if it, or some other one equally practicable, could be inaugurated and applied to all schools alike, one of the chief temptations to commercialism and competition rather than emulation, would be eliminated and each school would stand or fall accordingly as its intrinsic merits command recognition.

LICENSING.

I. BY EXAMINATION. II. BY DIPLOMA.*

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There should be no other requirement for entering upon professional work than a diploma from a college chartered by the state for the purpose of educating students, whether it be a classical course or upon some special branch, employing well-qualified teachers, who are thoroughly in earnest in their work and loyal to their profession, and are desirous to see only those who are thoroughly competent, enter it; who count the qualities of the student of more value than the profits of the institution.

It is evident that the schools are not all conducted on a basis like this, for the reason that there must be sufficient funds to defray all expenses, including the assistants' salaries, and sufficient dividend to justify the faculty or incorporators for the valuable time taken from their practice; not considering the added tone and dignity of being called "professor"—which is frequently used for profit.

The question arises: "How many students can we get at a certain rate each?" If one hundred are secured it will be difficult to get sufficient clinics for demonstration; how will this be accomplished? The usual way is to urge the students to solicit, not among the poor and

* Read in the Section on Stomatology, at the Fifty-second Annual Meeting of the American Medical Association, held at St. Paul, Minn., June 4-7, 1901.

needy, but among their own class of people, who are usually able to pay a fair fee, to a young man who is struggling to build up a practice; and as this business or commercial spirit increases the higher motive of professional education is lost sight of. What is more unprofessional than this manner of solicitation?

"A chain is no stronger than the weakest link." If license by diploma is accepted then the poorest school sets the standard for all. Hence the necessity for licensing by examination.

The necessity for examination is not a new idea; it can scarcely be called a modern one, for in 1700 a French writer urges the necessity of examinations in France for the practice of dentistry.

The history of reform in the dental profession in England, by Hill, conclusively shows, not only the necessity requiring examinations, but also the advancement from a scientific and professional standpoint, by which the people were the beneficiaries. On page 86 he quotes the remarks of the president of the Odontological Society (the late S. Cartwright): "It can not be doubted that a liberal education is of the greatest advantage to those engaged in practice, and the more education is extended in all ranks of society the more it becomes necessary that the members of our profession qualify themselves as highly as they can. For those who employ their services in these days have a right to look, and do look, to the qualities of the mind as well as mechanical adroitness of the fingers."

The main object of the above society was to unite members of the dental profession into a recognized body and provide a means of professional education and examination.

In nearly every criticism on dental legislation, or State Board of Examiners, the author gives the impression that the laws were passed for the benefit of the profession; if such were the case they should be repealed, as class legislation is in direct opposition to the principles of our government. The laws were made for the people.

Most of the Christian denominations require examinations for license; the medical laws are similar to ours, and the profession of law requires the same. In the writer's state (Pennsylvania) a law student must pass a preliminary, and after graduation must pass an examination before a board appointed by the court, the only persons competent to appoint that board.

The representatives of the people recognize the necessity of passing laws for their protection from the incompetent practitioners.

The best means possible should be adopted to test the qualifications of the aspirant to professional practice, and the most important is a judicious selection of competent examiners. As stated above, the court appoints the examiners for the law—they are the most competent to perform that duty, but would prove themselves unqualified were it required of them to appoint a medical board.

No one is competent to appoint a board for professional examinations except members in good standing in that profession. The difficulty of securing competent men for examiners in our profession arises from the necessity of their being appointed by the governor, thus making them officers of the state, and he being authorized to appoint, may be ill advised in the selection.

As the court is the representative body of the profession of law, and is competent, the only representative body of the dental or medical profession in the state is the state society, it should be a state society in fact as well as in name, which is not the case in some states. It must be chartered by the state, and to be a representative body must be made up of representatives (or delegates) from the local societies throughout the state. Act of 1897, Pennsylvania, gives the power of appointment to the governor and the selection to the state society (which is a representative body). Section 5: "The Pennsylvania State Dental Society may, at its annual meeting in 1897, and annually hereafter at said meeting, select as nominees the names of double the number of examiners required, who shall be members in good standing of the society, and transmit such names to the governor under its seal and signed by its secretary. From this list of nominees the governor shall, during the month of August, Anno Domini 1897, appoint a board of dental examiners. In case of failure of the said Pennsylvania State Dental Society to submit such list, as aforesaid, the governor shall appoint members in good standing of the said society without other restrictions. Each one of the said appointees must be a registered, bona fide practitioner of dentistry in good standing, and shall have practiced dentistry under the laws of this state for a period of not less than ten years. No member of a Dental College Faculty shall be eligible to appointment upon the State Board of Dental Examiners, but this shall not apply to membership in the Dental Council. The governor shall fill vacancies by death or otherwise for the unexpired term of said examiners, from the list of names submitted to him by the Dental Society."

Since the present law went into effect 823 applicants have been examined; these were graduates from 18 different schools. Of this number, 711 passed successfully and received licenses from the dental council; 112 failed to receive the required average. A fraction over 13.5 per cent. considering[1] "The measure had an *ex post facto* character, inasmuch as when it was passed many students had already spent two years in the dental schools, and in recognition of this fact the Board of Examiners has been lenient in the examination of applicants. This has no doubt aided in fostering good will toward the law. The influence of the work of the Board of Examiners has been beneficial, in that it has given a stimulus to the teaching in the schools and has induced stricter scrutiny of the acquirements of candidates for diplomas. Formerly students often sought the schools from which they could be graduated most easily, but now they prefer those that require a higher standard."

If the Board had marked the first two years, as they have since, the percentage of failures would have been doubled, as fully that number barely passed the required average—75 per cent.

Dr. John Sayre Marshall, president of the Board of Examiners for the Army, reported to the journals that out of a class of 14 applicants (the first to be examined) only 2 passed.

Is this not sufficient evidence that there should be a reform in the system of educating students for our profession? When the profession and the people realize the condition that now exists there will be no difficulty in getting laws passed that will be a real protection against quackery and contribute to hastening the time when the stomatologist will take the degree of M.D., leaving the name "dentist" to designate those who do only mechanical work.

1. Extract from report to the Governor.

DISCUSSION ON PAPERS OF DRS. CARR, PARMELE, TURNER, CHITTENDEN AND LIBBEY.

DR. EUGENE S. TALBOT, Chicago—One important part of dental education consists in the appointment of state boards, as well as the quality of the men upon these boards. A great responsibility not only rests upon them, but also great power. These men should be selected from the state dental societies. Twice the number of men required should be selected and appointed (at least the number required by law) by the governor of the state. Good men are thus secured, their appointment is legal and it places the responsibility. The proper men can wield a great power, and they do as it is, but if they were qualified men, of high ideals, of education, the specialty would be placed where it belongs. I believe these men can control the colleges and place the entrance and financial examinations exactly where they should be. That the graduates are not up to the standard has already been shown in the examinations made in the army through the National Examining Board for the Army and Navy. I have received a letter from Dr. Marshall in which he says 42 graduates have been examined and only 11 have passed. This shows the graduates of our dental schools are certainly lacking in some particulars. This has already been noted in an editorial in one of the journals, showing great interest in the symposium of last year. Dr. Marshall's report shows something more is lacking, and no doubt the agitation of these subjects will be productive of much good at the next meeting of the National Association in Milwaukee. This editorial hoped the men would not return to their homes without advocating the introduction of a four-year course in every dental college and I believe the time is coming when a four-year course will be demanded, thus giving the student a firm foundation for his life career.

A four-year course will necessitate a better understanding of the subjects the teacher has under discussion. Pathology, of which the student and the profession alike know very little, will and should become one of the principal branches. The bacteriology of the mouth, a great factor in diagnosis, is really a department of dentistry, and yet the first principles are scarcely taught or understood. The etiology of diseases of the mouth is yet in its infancy, and the coming dentist must not only be a "plugger of teeth" but an all round pathologist.

DR. VIDA A. LATHAM, Rogers Park, Ill.—I think the solving of the whole question comes with the preliminary education—registration. The candidate enters the Northwestern University, the Chicago Dental School, or any other dental college. The candidate applies for entrance just as those Dr. Chittenden has mentioned, and is permitted to register, let us say, on a high school or university diploma. The city of A has a good high school whose certificate indicates a sufficient preliminary English education. But another candidate with a diploma from the schools of the town of C can perhaps hardly do more than write her own name! There are all kinds of universities and high schools, unfortunately. Compare the schools and universities of Duluth, Chicago, and New York with those in certain other places. How can you make them equal in subjects or standard? Yet any of their graduates might register in a dental or medical college on these diplomas, however unequal their qualifications. The trouble is in standardizing the elementary requirements in every case.

There is another thing to be brought out in this connection. Supposing I advertise; supposing I am a quack! The College and state board do not take my diplomas away for misdemeanor! I can move into another state and practice again! These are the things that should not be tolerated in this country, especially as it is doing damage to our colleges. We meet with this matter of diploma everywhere.

DR. R. R. ANDREWS, Cambridge, Mass.—There are a few words I wish to say in regard to raising the standard of the examinations of the boards of registration of the different states. In New England they are trying to equalize the examination in each state, so that a student may take the examination in one state, and practice his profession without taking another examination in any of the New England states where he may wish to practice. This reciprocity among the states is what the profession at large will demand. Public opinion in the profession is strongly in favor of such a movement, and if the National body will adopt a standard and live up to it, a man who shall once pass a state board can have the privilege of practicing in any state in the Union without further examinations.

As the law stands to-day, a man may pass a creditable examination in all points. At the end of five or ten years, on account of sickness or something else, he is compelled to go to another state, where he expects to practice his profession. He has his diploma, which he has earned, and his certificate from his state board, stating that he has been examined and found worthy. He has passed five or ten years in honorable practice, and with this record he should be allowed to continue without further examination; but as the law stands to-day, this man, with all his experience, has got to go before the board of that state and pass an examination, the same as the young man just graduating. What we want, and what the profession will soon demand, is that a man having once passed a creditable examination of the state examining board in one state, shall be allowed thereafter to practice in any.

The National Board should consider the matter of giving to the different state boards certain rights, in considering cases where a man has been engaged in honorable practice for twenty or thirty years, and who is obliged through illness to go where he is ordered by his physician to regain health. I have in mind the case of one of the founders of the Harvard Dental School, a man of thirty-years' active and honorable practice, one of the most able operators in the city of Boston, and respected by all who knew him. He was ordered West by his physician. After awhile he was called before the state board of examiners and candidly confessed that he could not pass their examination in chemistry, bacteriology, and other scientific courses presented, but stated that he could give them abundant testimony of his ability to practice his profession. He did not take the examination, but came North, and took a college course which admitted him to practice. The board is established to protect the public; can anyone doubt that with this gentleman's high standing, eminent ability, and years of experience, he was unable to fulfill every demand?

I have in mind the case of another who was graduated from one of our special schools in Boston. He went to Germany, and was in practice with his brother for a number of years. He is a fine operator; he is so good a mechanical operator that he is to-day employed as one of the instructors in that department of one of our schools. He is a very nervous man, who is easily rattled by an examination. Coming back to this country, and wishing to practice, he went before the board, but became so nervous that he could not pass the examination. In this case, there is no question but what the public would be well treated if he had been registered. I am myself an advocate for a good solid examination, but the examinations given by some of our boards, especially by new men who have recently come in, have in some cases been severe, with catch questions. It has been acknowledged by members of the board in our own state that it would be very difficult for them to pass their own examinations. It is a fact that a member of the board of a neighboring state was compelled to move to Massachusetts, tried the examination and was turned down. This question is one of great importance. There must be reciprocity between the states, and the sooner this matter is considered by the National Board, the better.

DR. CHARLES CHITTENDEN, Madison, Wis.—I think there is scarcely a board in existence that does not consider the number of years a man has had in practice. In Wisconsin our Board has in its code of rules a rule something like this: "Candidates having had ten years or upwards of practice immediately before applying for this examination shall be required to pass only a 50 per cent. examination." I think that rule applies in a majority of the states.

DR. GEORGE J. DENNIS, Chicago.—I am not actively engaged in the work of dentistry at the present time, but the raising of the standard of dentistry is something that always appeals to me. The question came to my mind as I listened to a paper that was recently read, and it also appeared recently in the papers, as to what would be the remedies for raising the stand-

ard of dental education. We have talked about dental education for years, and I believe the subject has been often brought up in this Section. Is it to be remedied by law or simply by the good intent of the majority of those who have this matter in charge? By that, I mean the faculties of the different schools or the members of the state examining boards.

The matter of requiring a dentist going from one state to another and failing to pass the examination of the board of that state, it seems to me, is entirely wrong on the part of our examining boards. They seem to fail to recognize that years of labor and years of reputable standing in a community count for very little compared with the examination simply. Examinations of a dentist's ability, as a rule, do not amount to much. I think that is recognized by medical men generally. Oftentimes an examination shows but very little of what a man is capable. This is recognized by examining boards in hospitals. Often in connection with the examination they will take into consideration not merely the quality of the paper that is presented, but the quality of the man, his moral standing, his standing in the community, and his ability in lines outside of mere memory, and the actual tests by presenting human cases of his ability. It seems to me that a dentist who has worked for years in one state ought to be valued for his manipulative ability very much more than to have his standing judged entirely by a written paper.

In regard to the matter advocated in one of the papers, of paying for the work of the examining board by fees from the candidates for examination, I think that method has been so thoroughly tested and proven a failure that it seems to me entirely out of the question to consider it here. The people are the ones who should bear the burden of expense. They are the ones who are being protected by the examining board, and they should bear the expense of the examination.

DR. J. R. CURRENS, Two Rivers, Wis.—I am not a dentist, but I am a member of the Examining Board of Wisconsin. We had a meeting of the representatives of the Examining Boards of the United States yesterday in which these matters came up, and what impressed me here to-day is in regard to reciprocity between the different boards. I think if something can be arrived at, and if our laws can be so framed that they give the boards the power to recognize licenses from other states, I can not see but what it is the right thing to do. In the medical profession we have a little more difficulty than you dentists have. We have three or four schools to contend with, and the situation is a great deal more mixed. We have on our board two regulars, two homeopaths, and two eclectics. After July 1 we will have to take on one of our manipulative friends. In regard to this reciprocity business, there are many men who have grown old in the profession, their family surroundings are such, the condition of their health is such that they have to have a climatic change, and it is a great hardship to those men to put them through an examination. The matter of diplomas and examinations came up here this afternoon, and I believe in the medical line we are worse off than you are in the dental line. It is very hard for the State Board of Wisconsin to tell about the standing of a medical college in Alabama or Tennessee. For example, these schools will get out a curriculum that one will read with admiration, but they will take almost anything in the way of entrance requirements. Under our law we can require a diploma and examination both, and we will have such under direct control. It is all right to use a diploma if you know it is from a reputable school, but you can not have a class legislation, and there are very few boards that are allowed to use their discretion unless they have an investigation, which is a rather difficult piece of business. Most boards have to be self-sustaining, and it would be an admirable thing if they could prevail upon the legislators to make the concession, but it is difficult to make them believe that it would be for the benefit of the people instead of the medical men and the dentists. They want us to be self-sustaining, and it places us in a rather bad position sometimes. There was a flaw in our law in the revision of the statutes, so that we could not even send a man out to investigate a case without calling the whole Board together. We had a reserve fund of $1200, and the result was that we had to turn it into the treasury. We tried to get it back, but could not do it. We had no money to investigate anything; the state has the money, and it will stay there.

To my mind, the solution of the whole matter would be this: In the first place, raise the standard high. See that the primary education is brought up to a high standard. In regard to the high school standard which has been referred to, we have a clause in our medical law which provides that the high school standard must be up to the high school standard of our state. In that way any difficulty can be obviated very easily. One medical college fought very hard against the high school standard, and we had to cut it down to the junior year, but we expect to raise it two years from now. We have got to go slow in these things, and in this reciprocity business try to get the state laws on the same plane, and if we all join hands the matter can be accomplished. The laws are queer things to handle. There is that word "reputable" that is in the law. If a man is from a reputable college, the board has some discretionary powers, but if you get too particular about it, the board may decide you are a little too strict. It is a hard thing to learn the ways of the law. We had a case before our Board. Our law of 1897 was a very fair law. A disreputable individual took several courses in some Omaha medical college, and they refused him graduation. They pretended he did not come up to the standard. The fact was he passed a good examination, but it was on account of his moral character they refused to graduate him. The result was he went to St. Louis and graduated from the Barnes Medical College. He then went to North Dakota, and the Secretary of the State Board of North Dakota wrote to our secretary that the man was disreputable and doing all kinds of dishonorable things. He ran a lightning-rod business. He would go to a farmer with twelve children and tell him if he would give him a note for $100, he would take care of his children for twelve years. He took notes and sold them to some banks. He did the same thing in Iowa and Nebraska. Then he came to our state and wanted a license, and we refused him. We supposed our law was all right, but there was a revision of the laws in 1898. Our Board was a little afraid about those session laws of 1898, but we supposed they were all right, but they changed the wording somewhat and the punctuation, thinking it would come out all right, but if you take these things before a jury they do not always come out as expected. The case came before a jury and the fact of the matter was he beat us and we were obliged to license him. Now, he threatens us with personal damage suits.

DR. R. H. NONES, Philadelphia—I am interested in the symposium and the various talks I have heard, and the whole question is a matter of cause and effect without arriving at the proper remedy. There are some apparent remedies, but to select one that would answer every case is a difficult thing to do. If we do seemingly find a remedy, one problem succeeds another until we find it is impracticable. How would you take care of the older practitioner if he wanted to move from one state to another? That would immediately be fought in some states that did not want a man to come over from another state, and that brings up the question of the survival of the fittest. It is a very well-known fact, yet a very sad one, that if a man has been in practice for some years, and he may be a young man, too, he neglects many of the theoretical branches which the examining board compels him to take. Now, if that man has not taken such an examination that is demanded of the younger men, I do not see how you could get a state board to pass him. It would be somewhat retro-active, to my mind, because he has had the opportunity to have had those qualifications which should fit him to go on in advance of this younger man. It acts in this way, you may say. Many a young man who, as has been suggested, might make a very competent dentist if he had those qualifications in later years. Why should not that young man have this same privilege to enter and bring up the necessary qualifications as the older man has, where you give him credit for forgetting his earlier qualifications? I say this problem and many similar problems have come to me. We have tried to get too many things instead of getting one good thing at a time. We started with too many things we wanted, and received nothing. I believe had the Association of Dental Faculties incorporated into their act or law, or whatever it was that was passed, a curriculum that should have been passed by the

student, his preliminary education would have been much better than by grading the standard to one, two or three years, whatever it may be, of high school. With all the careful thought of these gentlemen they little, I suppose, thought that immediately it was entered upon the question would come up: What is one year of the high school in one state or another? Immediately that trouble arose, and it has been one of the very hardest things to contend with in colleges.

I can verify Dr. Chittenden's remarks in regard to qualifications; I have seen them in all forms. When students presented credentials to me, I have invariably taken their credentials from them and told them I would send them to the Superintendent of Public Instruction to have them passed upon. I think by immediately taking his credentials from a man you can settle the matter for all time. If that credential comes back, I can follow him up in any other school and tell them they have no right to take that man. That is a thing for the deans to look into. The other gentleman who spoke made the point of a faculty being liable to be mandamused. That is a very strong point, indeed. You think you are treading on safe ground when your state board says to a graduate that he is not a graduate from a reputable institution. The question comes up: What is a reputable institution? In order to emphasize that point I will cite the case of the school I am connected with—the Dental College of Philadelphia. We had some difficulty to get our dental college into the faculty. They refused us admission, and we went to teaching dentistry under the charter of the medical college. We sent our students before the State Board, and they refused to examine them. We threatened them with mandamus proceedings, and after consultation with the attorney-general, they were compelled to examine our students; they passed the Board, and shortly after that we were admitted to the Association of Faculties. Other states refused to do the same thing, but they soon fell into line. We were in perfect harmony with the faculty, but the question arises: What is a reputable school? This is a very serious question, particularly the point of getting men whom you would like to see on the state board. Those men, as a rule, are very busy men; men who can not afford to give their time to such a work as this. It is not a pleasure. I have seen a great deal of it. I am acquainted with the State Board of Pennsylvania, and I know the amount of work they have to do. I say there is absolutely no pleasure attached to it. In regard to the matter as to how the men on the state board should be recompensed, that is a difficult problem. The class of men that should be on the board are difficult to obtain, because their time is of a great deal more value to themselves than the recompense they get from the state. I see no other plan except that of the fee being paid by the applicant. It is a matter of the utmost folly to ask the public to pay for such services by taxation. The question is whether they want protection. The general public does not want protection, as a rule. I went through one of the large department stores in Chicago, and it was a matter of surprise to me that in this large department store they are doing dentistry work at "Fair" prices. They claim to do crown and bridge work and such things, and that in the second city in the Union. If the public does not want protection in the large cities, what could you expect in the smaller towns, where you would expect to tax the people for this protection? Would they want it? I say most assuredly not.

There is another point that struck me while listening to these papers, and that is in regard to the matter of Dr. Marshall not passing some twelve out of fourteen. That casts somewhat of a reflection at first thought on the various schools throughout the United States. To my mind, it does not, because I look at it in this light, that the greater majority of those students that are passed upon by the examining boards have made up from one to two years, and you can see at once that it makes it difficult for those men to pass. Again, I say without any hesitation, I believe the majority of the state boards of the United States could not pass their own examination. I say that without casting any reflection, but I do not think these gentlemen have kept up with the various theoretical subjects. It is out of the question to expect them to do such a thing, and I think it would be a point of much interest had Dr. Marshall told us whether it was the theoretical or practical branch in which they were lacking. I have always tried to find out the weak points of my students when they appeared before the state board, and tried to strengthen them on those points in college. I think that is a point the various state boards should give out. It would benefit the schools materially, and in that way the profession at large would be benefited.

DR. A. H. PECK, Chicago— Dr. Talbot has stated that state examining boards have power to regulate some phases of the individual college work, such as the preliminary requirements, etc. If Dr. Talbot's judgment is correct, and in a measure it is, I do hope the day is not far distant when the state dental examining boards may be placed in position where, by special legislation or advancement of public sentiment, or whatever the means, they may be able to successfully use the power that is placed in their hands that the entrance of students to our various colleges may be regulated and placed in the condition it should be, because we all know that the entrance of students to our colleges has not been what it should be. In other words, not to cast any reflections upon any institution, all colleges are pretty much alike in this respect. They pay very little attention, as a rule, to credentials presented by students. Many of them are private institutions, and are in the field for private gain, and whether or not the student who applies for admission possesses the necessary qualifications to carry him through lies with the powers that be. This is a demoralizing condition of things in this phase of dental education, and may the day be hastened when this condition may be eliminated and our institutions placed on their proper plane.

DR. CHARLES CHITTENDEN (closing the discussion).—There is no question about the power of examining boards, provided they have the dental colleges and the dental profession at their backs. Examining boards can do anything it is desired should be done for the dental profession in the matter of standards. As I tried to exemplify in my paper, there is no question but that the boards and the colleges together can do all that there is to be done in this matter. The difficulty has been in the past with the colleges and the faculties associations. For sixteen or seventeen years we have waited for the National Association of Faculties, who said that they would fix the standard; that they could be trusted, and that as soon as they had all schools in they would see that the standard was raised to where it should be, and that all these evils were corrected; but I think now, if the members of the Association were asked, they would admit that they have in the Association many schools that ought not to be recognized. Last year there was a school examined by a special committee of the Faculties Association, and a report brought in, which I had the honor of being permitted to see, prepared to be presented to the Faculties Association, but it was so scathing in many of its criticisms of the school that had been examined, that the report was withheld. I hope to see that report brought forward some day and the school properly dealt with. The Faculties Association feels it has a lot of weak schools represented, but it does not want to cause a disturbance, and the result is they have nothing by which to hold up the standard. They do not seem to remember that they should come to the examiners and join hands together and settle upon a standard; they do not stop to think that there might be a more successful method.

A gentleman said he would like to know in what branches the students were most likely to fall down. Our experience has been that students fall down first in simple anatomy. Next, they will fail on a dozen questions that almost any child in a common ward school should answer. That has been our general experience.

I desire to append the following letters, which speak for themselves:

Wisconsin, July 29, 1899.

"Gentlemen of the School of Dental Surgery.

"The bearer, ———, of this city, is a young man of good moral character and a very good student. In the year 1896 he was qualified to hold a second grade certificate to teach

school in ———, which was equivalent to a three-year course in the high school of this city.

"Supt. of —— School from 1894 to 1896."

"Dr. ———, Chicago, Ill., Dear Sir:

"Mr. ———, the bearer, impresses me as a young man in every sense qualified to take a dental course.

"He states that he completed the graded-school course and a portion of the first year of the high school course in the city of ———. Since then he has had several years of practical experience in a telegraph office in this city.

"Respectfully,

"Asst. State Superintendent.."

POST-OPERATIVE HEMORRHAGE.*

A. H. CORDIER, M.D.

President of the Mississippi Valley Medical Association; Professor of Abdominal Surgery, University Medical College.

KANSAS CITY, MO.

I know of no condition in my work that is more horrifying than to realize that a patient upon whom I have just performed an abdominal operation is bleeding dangerously. I know of no condition under which the surgeon will more quickly realize the importance of his work and appreciate more fully the great responsibility existing in every abdominal operation.

An avoidable accident to a patient that may result in the death of that patient is a very serious matter and should not be passed over as a trifling affair by the surgeon. Trying to give contentment to the sorrowing family and friends by assuring them that the all-wise Providence willed it thus may satisfy the unsuspecting and confiding family circle; but does it relieve the mind of the surgeon or save the patient?

The use of unstable ligature material on large pedicles and in localities where the same is quickly absorbed has cost quite a number of patients their lives from post-operative bleeding. It has been my misfortune to lose one patient from a post-operative hemorrhage, the cause being the use of a catgut ligature. After a large series of cases in which I used silk (I use it altogether now) without an accident of this character, I was persuaded to use catgut in a simple and easy case. This case was in a private residence in a distant city. Three hours after the operation my patient died from hemorrhage, the result of a slipped catgut ligature. I know that the ligature was responsible for this death. It should have been avoided. Dispensations of Providence are garments that may be used to hide the naked truths from an ever-credulous public, but before the eyes of the conscientious surgeon he sees the slanderous injustice of hiding his blunders under such sacred raiment.

That many fatal post-operative hemorrhages are unavoidable no one will deny, and it has been the experience of almost every surgeon to have had such. The recognition of the possibility of a patient's bleeding to death following an operation should only make the surgeon more careful to avoid it and to resort to the best method of speedily checking it when it has taken place.

There is no condition in which quick surgery is more essential; I mean by quick surgery, not alone getting at the work quickly, but rapid work after the secondary operation has begun. A patient who a few hours previously has gone through a severe operation, probably of long duration, or of a character to produce shock, is not a very good subject to be given an anesthetic and undergo a reopening of the peritoneum. If the surgeon does not recognize this, the majority of his patients who are reoperated upon will die. No chronic or deliberate surgery can be tolerated by such a patient.

The use of the Trendelenburg position, while it enables the surgeon to see the bleeding points and to tie them most efficiently, may by gravity, in a patient with a weakened heart, keep a vessel from bleeding during the operation that may bleed profusely on the patient's assuming the horizontal position when placed in bed. This is especially true of capillary oozing from adhesions.

The drainage, as has been urged by Price and others, is not only valuable as a sentinel, but has a direct hemostatic power. All recognize the necessity of a clot, firm in character, to control oozing or even bleeding from larger vessels. Blood in the air-tight peritoneum, in the presence of a peritoneal temperature and abundance of lymph, will not coagulate quickly or at all firmly, as all will agree who have opened the peritoneum in cases of ruptured tubal-gestation or other conditions where there has been a free intraperitoneal bleeding.

A drainage tube in suspected cases for a few hours will do no harm and will surely give the indications of a hemorrhage. If the bleeding is from small vessels, the keeping of the peritoneum dry will be a potent factor in controlling the bleeding. Of course, the tube should not be used unless some reason is present for its use.

While the tube is of much use in suspected cases, its utility is lost in the case where a hemorrhage occurs in a patient in which such an accident is not expected. Thus, my three post-operative hemorrhages have been in easy cases where such was least expected. My other secondary operations for bleeding have been in patients of other surgeons. I was called in their absence, saving the patients in each instance.

The symptoms of a concealed hemorrhage are very much like those attending shock, and, if the symptoms alone were relied upon to make a diagnosis, many errors would result. The pulse is increased in frequency in both, and diminished in force equally in the two conditions. There is a sighing respiration in each, the features are pinched and the surface is blanched in the two, the skin is clammy in both, the patient is comfortable and indifferent in each, the pupils are dilated and respond slowly in either condition.

How is the diagnosis best made? Take, for instance, a fairly strong patient, remove an ovarian tumor from that patient, occupying from fifteen to twenty minutes in the operation. There are no adhesions, there is a small pedicle, a silk ligature is used, and the patient is put to bed in good condition at 9 a. m., with the pulse 80, the temperature 98 F., and with no shock. Now visit this patient at 3 p. m. the same day, and find her with pupils dilated, features pinched, free from pain, the skin white as marble, the lips shrunken and pale, the pulse 160 and very compressible, with a cold, clammy perspiration, all symptoms of shock or hemorrhage. Analyze the history of this case, and experience will say that a patient leaving the table in the condition of this patient, having had no evidence of shock or anything done to produce shock, has an internal bleeding from a broken or slipped ligature; the doubt, if any existed, should be quickly dispelled by cutting a suture and introducing a tube or an artery forcep.

Take another case: Extensive bowel adhesions have been separated in enucleating a growth, the operation is

* Read in the Section on Obstetrics and Diseases of Women, at the Fifty-second Annual Meeting of the American Medical Association, held at St. Paul, Minn., June 4-7, 1901.

a very long one, the patient is more or less shocked at the completion of the operation, this condition continues until it assumes an alarming state, and the question arises: Is this a continuance of the shock, or is it in part, or altogether, due to a bleeding? If a tube had been introduced, no doubt need exist, but in the absence of the tube there is nothing absolutely reliable to guide us but the cutting of a suture and opening a small portion of the wound. This can be done with absolute safety.

On the other hand, if this patient had left the table in good condition and a few hours later presented the shock-hemorrhage picture, it would be quite safe to diagnosticate hemorrhage and act accordingly. As a rule, the first evidences of shock begin during the operation, and many cases of secondary shock in reality are cases of post-operative hemorrhage. Each case is an individual; the experience of the operator and his knowledge of what was done, and who did it, will lend much aid in determining the cause of the symptoms manifested, as well as the probable location of the same, if from a bleeding surface or vessel.

If convinced that the patient is bleeding and that the loss of blood will prove fatal, the surgeon's only duty is plain, and he should not shirk it, while giving strychnin, using hot applications, etc. The patient is not safe until the bleeding is controlled. I do not mean a slight oozing such as we often see in the tube in adhesion cases, but by hemorrhage a loss of blood that *quickly* shows its dangers by the rapid failure of the patient's vital forces.

It has been my misfortune to lose one patient operated on from a hemorrhage coming on a few hours after ligating a small pedicle with catgut. The abdomen was reopened, but the patient was dead or had ceased breathing when I had begun. The abdomen was full of blood. I have reopened the abdomen in two of my cases besides this fatal one; in both large quantities of blood were lost, but in both recovery followed. In two cases in the practice of other surgeons I reopened the abdomen, saving both patients.

The proper use of the deci-normal saline solution in restoring patients in cases of shock and loss of blood is one of the most valuable additions to our work within the last few years. Its application is so simple and easy and its powers for good are so large that I am surprised that it is not more extensively employed by the profession. The introduction of air into the vein at time of infusion should be avoided, yet the danger from this source is not so great as is generally supposed. In one of my cases a faulty apparatus permitted a large amount of air to enter the vein. This was done by one of the nurses handling the bulb of the apparatus in such a manner that it let in air. Not a symptom was produced by this accident. I have in all my cases, save this one, used an ordinary fountain syringe and the cannula of an aspirating outfit or, as in one case, the glass nozzle of an ordinary medicine dropper. Everything about the apparatus must be carefully sterilized. The salt should be baked and the water, when possible, filtered and always boiled. The height of the fountain will govern the pressure. Usually a 3-foot pressure is all that is necessary. The fluid must be kept at a uniform temperature of 112 F. in the bag. A lower temperature will frequently cause the patient to "chill." I think it best to introduce the fluid in two sittings where a large amount is necessary. About 90 grains of common salt to a quart of water is approximately a "deci-normal saline solution."

CONCLUSIONS.

1. In diagnosticating post-operative hemorrhage the operative history will aid much.
2. The symptoms of shock and those of hemorrhage are very similar.
3. In suspected cases the cutting of a single stitch in the incision will tell.
4. The surgery must be quick and decisive in these cases.
5. In cases in which bleeding is expected the tube should be used.
6. Large quantities of deci-normal saline solution will save many patients. This should be used both per rectum and by injection into the veins.
7. Strychnin, belladonna, etc., will not control bleeding from a uterine or ovarian artery any better than from any other artery.
8. The surgeon should do what his surgical conscience tells him is right. Late researches in hematology make it appear that an internal concealed hemorrhage may be demonstrated by a careful blood-count. This, it is stated, will show a decrease in the red cells and an increase in the white.

Very similar symptoms accompany shock from various causes, such as internal hernia, etc., none of which produce a change in the red cells. If an operation was performed for the relief of an inflammatory process, this test would lose its value in part, as there would exist at the time of operating a leucocytosis. Saline infusions apparently increase the white cells at first.

DISCUSSION.

DR. L. S. MCMURTRY, Louisville.—In my brief remarks I shall allude to the prevention, diagnosis, and treatment of this condition. We all recognize that post-operative hemorrhage is due to either a broken or a slipped ligature. In my judgment, it is rarely due to the former, and almost invariably due to the latter. I must disagree with the essayist that the ligature material used has much to do with the causation of hemorrhage. I myself, like the essayist, prefer silk, but I recognize the fact that there are gentlemen present who use catgut uniformly, and they can show just as few instances of post-operative hemorrhage as can those who use silk exclusively. After all, it is not so much the material used as the method of application. The man who is in the habit of using one kind of ligature gets accustomed to it and applies that ligature with more celerity and security than if he changes his method frequently. A man who is in the habit of applying catgut to a pedicle or vessels will succeed just as well as he would with silk. Care must be observed in the application of a ligature. For example, in the operation for the removal of uterine fibromata the broad ligaments are usually in a state of great tension, and if the ligatures are then applied and divided, you are inviting the accident of slip ligature, because just as soon as you relieve the tension, the tissue shrinks and the pedicle is apt to slip out of the grasp of the ligature. This accident can be prevented by securing the broad ligament with clamps, and then when there is no tension apply the ligature, place it carefully home, and make sure that it is of good and tested material. As to the prevention of this accident, then, it depends for the most part on the care and surgical precision with which the ligature is applied.

The diagnosis is to me a matter of great difficulty, and the importance of it can not possibly be exaggerated. Secondary operations in the abdomen are fraught with the greatest peril. A patient who has had an operation performed on one day and is obliged to submit to another on the next day can not be expected to bear up under the severe strain and shock. These patients will usually collapse and die, even though the post-operative hemorrhage,

for which the operation is performed, may have been very slight. You can take a woman with a ruptured tubal pregnancy and with the abdomen full of blood, open the abdomen, occupying nearly an hour, perhaps, in doing so, and she will not have the same amount of shock. The question of interference for the prevention of post-operative hemorrhage is the most difficult, in my judgment, that the surgeon has to decide. Lives have been lost by deciding to do it, and lives have been lost by deciding not to do it. The question must be decided with great care and deliberation. In neurotic women, the circulation and respiration are markedly increased in rapidity after abdominal operations, and it will test the judgment of the most experienced surgeon. Patients with rapid pulse, sighing respiration, neurotic temperament, exhibiting the symptoms the result of neurotic influences, will so simulate post-operative hemorrhage that it will require the greatest care and judgment when making a diagnosis. Therefore, it must not be decided hastily.

The intravenous injection of normal salt solution should never be done when it is possible that the hemorrhage is still going on, because it will be increased on account of the open vessel. The treatment should consist in operative interference decided carefully and judiciously, and which should be executed promptly and rapidly. I do not believe with the essayist that the amount of blood lost should be an indication for or against the interference in post-operative hemorrhage. Oftentimes you will find profound collapse and death occurring from the loss of almost an insignificant quantity of blood. On opening the abdomen of a woman who has had one operation which was followed by symptoms of hemorrhage, you will sometimes be surprised to see how little blood has been lost. There may be just oozing from the venous surfaces, and which will lead to disatrous result. I have opened abdomens and found pedicles intact, but on the side of the pelvis where the adhesions were severed, there was a little trickling of venous blood, and the patient almost gone.

Prompt hemostasis must be performed, and you can not expect to tie vessels when there is oozing, but arrest hemorrhage by quickly packing the entire cavity with gauze. There is no procedure in this department of surgery that requires the exercise of such good judgment and judicious action as is required in the treatment of post-operative hemorrhage.

DR. SETH C. GORDON, Portland, Maine—Since 1884 I have used no suture or ligature except catgut, with the single exception of silkworm gut, for the closure of abdominal wounds. I believe the time is coming when we are all going to use absorbable sutures and ligatures. In my own experience, I still have to see the first intraperitoneal hemorrhage. I never tie off the pedicle without using a needle, threading one end of a long ligature and carrying it through the pedicle below the ligature, then double-wrapping and firmly tying it. In all cases of hysterectomy, where I am to remove everything, I ligature with the needle as described. I put on the clamp and commence my first ligature by tying the ovarian artery tightly, then carry my needle below that, make another knot, which prevents hemorrhage. The rest is the same, over and over, down to where I cut off the uterus. It is all done with one suture. I certainly would not use a drainage tube in order that I might be protected against pelvic hemorrhage.

DR. HOWARD A. KELLY, Baltimore—I am very glad to hear this timely subject brought up for discussion. My former associate in the Johns Hopkins Hospital, Dr. Clark, who is here, will probably recall a case we had some six years ago, where eight days after the operation a woman died from hemorrhage from the right uterine artery, which autopsy showed to be due to the absorption of catgut. Since that time I have preferred to use absorbable ligatures upon what I call cardinal vessels, the two ovarian and uterine arteries. Furthermore, I see no reason why we should desire any other material than fine silk aseptically used; with that, and with gloves worn at the operation, the ligatures will never trouble you afterwards. It is of extreme importance in this work to avoid the antiquated method of tying the pedicle by a ligature which transfixes it and is then tied both ways. The proper ligation of the ovarian pedicle is one ligature at the brim of the pelvis, and the other at the uterine cornu. It is as a rule best to put two ligatures upon all the principal vessels. The most important step of all in the avoidance of hemorrhage is the thorough systematic review of the entire field of operation before closing the abdomen, looking over all ties, and pronouncing a definite judgment on each step of the operation.

The best assurance that there is not going to be any hemorrhage lies in the satisfactory conduction of the operation, so that when the patient lies later in a collapsed condition, and the assistant or nurse is rather doubtful as to whether there is any hemorrhage, the operator can say with positive assurance that he knows there is none. The operator and his assistants ought to inspect the patient carefully as she leaves the table; to examine the pulse and the mucosæ, to get an exact idea of her condition, and in order to make comparisons later to determine whether much blood has been lost. If the operator is unable to say whether or not there is hemorrhage, open up the patient at once, and see. If the patient is a collapsed neurotic, it will not hurt her; but if she has hemorrhage, prompt action will save life.

I give salt solution under the breasts, and as the patient goes onto the table. Do not stop to pick out the exact seat of the hemorrhage. You know which vessels it may come from; therefore, go down into the pelvis with fingers and clamps, catch them all, both uterine and ovarian, then clean out the blood and search for the particular source of the hemorrhage.

DR. HENRY O. MARCY, Boston—I believe that hemorrhage is usually the fault of defective technique. First, the vessels should be sought for and ligated. Then, it is important to suture the tissues over the vessels of these larger wounds so as to have additional control over the ligatures. I earnestly advise the folding of the peritoneum over the stump, as it also prevents hemorrhage, and the possible subsequent adhesions, which otherwise may result. I emphasize this from the standpoint of experience. I believe my best contribution to surgery is the buried animal suture, which I first employed in 1870, and have used it almost daily since. Until 1882 I used only catgut, and with reasonably satisfactory results, but in the long experimental studies that I made on animals, I found that catgut was absorbed much too rapidly, and that the knot is not satisfactory. Then I introduced the tendon suture, as a substitute, which I consider in every way superior.

I take issue with Dr. Kelly in regard to the rubber gloves and the silk, as they do not always prevent the condition he speaks of. I have often found that silk ligatures give rise to irritation and serious subsequent trouble. I am convinced that we should use only absorbable ligatures and sutures, and in such a way that we may be doubly sure that we have control of hemorrhage before the patient leaves the table. We should intrafold all abraded surfaces in pelvic or abdominal wounds, so that we may not have the condition Dr. McMurtry referred to, namely, oozing surfaces. Faulty technique is undoubtedly the most frequent cause for the occurrence of complications of any kind. I have used buried animal sutures in fully three thousand cases of abdominal operations, and I assure you that I have yet to see any reason why I should not be more than ever an enthusiastic advocate of their general adoption in all aseptic surgery.

DR. FREDERICK HOLME WIGGIN, New York City—I have found chromicized catgut No. 1, or No. 2, to be a much more satisfactory material for ligature or suture than silk. In former years much trouble frequently resulted from the use of silk for this purpose, not only in my own work, but in that of others. Frequently, in the course of my service at the City Hospital in New York, in past years, I have had occasion to remove silk ligatures and sutures employed by other surgeons at previous operations, but at the present time, since the use of catgut for suture and ligature material has become to be more generally used, these operations are becoming infrequent. If chromicized catgut is used, taken direct from the alcohol in which it is preserved, there should be no trouble

in its being absorbed too soon or of its infecting the tissues. It has been my practice, whenever possible, to pass ligatures around the vessels to be tied by the aid of a needle, and when this is done and the catgut properly tied, there is no possibility, in my opinion, of their slipping. One of the causes why ligatures of catgut or other material slip is that there is too much tension applied to the parts when the ligature is being tied. Another reason why operators often fear to use catgut ligatures is because they find when they tie them the knot frequently comes undone. This is because they do not understand how to make the knot. They tie the catgut ligature as they would one of silk, namely, with a double loop first, followed by a single one. When the knot is tied in this way, it will very often become undone. Some years ago, Dr. C. C. Frederick, of Buffalo, called my attention to the fact that catgut, tied first with a single knot and then with a double surgical knot, the ends of the catgut being left reasonably long, would never slip. Since that time I have used catgut for ligatures entirely in my work, and have had no reason to regret its use.

The surgeon should aim, in my opinion, to tie the vessels as directly as possible, including as little other tissue as is absolutely necessary.

I would like to call attention to the following important point: Where abdominal operations are performed on patients in the Trendelenburg posture often when the operation is completed there is apparently no hemorrhage, but in many cases when the patient is lowered into the horizontal position, you will find on looking about the pelvis, bleeding points. I have often found that if I had not been careful in looking over the field of operation after the patient had been lowered into a horizontal position, I would probably have lost the patient from hemorrhage.

I believe that when catgut is probably used, there is no danger of hemorrhage occurring from vessels tied off with it.

DR. C. C. FREDERICK, Buffalo—I have used catgut exclusively for ten years, and in nearly a thousand cases, and I had only one case of slip ligature. That was in a vaginal hysterectomy where the pedicle had been pulled down a great deal during the operation. I believe that was the cause for the ligature slipping.

As to the point made by Dr. Kelly, that the catgut absorbs too rapidly, and that the plug occluding the vessel may be extruded by arterial pressure, and then have hemorrhage, I think that possibly may be true. Formerly, the catgut was sterilized by the Cumol method or alcohol under pressure, being raised to a temperature of 212 and above, rendering it rapidly absorbable. With the modern method of sterilizing, however, I am positive that the catgut is rendered more durable in the tissues. I refer to the formalin process. I know positively that the catgut so prepared is not absorbed until two or three weeks afterwards, hence Dr. Kelly's objection to it cannot be sustained.

Insure against slipping of the ligature by drawing the first knot up tight, and then make the double knot. Do not cut the ends of your ligature too short. There is absolutely no objection to leaving one-half or even three-quarters of an inch of catgut. It aids in preventing the slipping. That is the method I have followed in all my cases.

DR. M. L. HARRIS, Chicago—I wish to enter my protest against the ligation *en masse* of large pedicles. There is scarcely a place nor time in abdominal or pelvic surgery where this is necessary. In most cases where secondary hemorrhage has occurred it will be found that the ligature has been applied to the pedicle *en masse*. We should invariably follow the sound surgical rule of applying the ligature directly to the artery or the bleeding vessel. If we ligate *en masse*, the tissue about the vessel may shrink, releasing the vessel, and hemorrhage is sure to follow. In all cases where there is a large mass which bleeds, this should always be closed by a suture, passed with a needle, and in a continuous manner. This will prevent not only the hemorrhage from the vessels, but also the oozing. I think there is no time or place in abdominal or pelvic surgery in which the mass ligature should be applied.

DR. G. B. MASSEY, Philadelphia—It seems to me that one side of this question has been somewhat neglected, namely, the future effect on the patient of the material used as a suture. The question of secondary hemorrhage brings up that of the relative value of absorbable and non-absorbable suture materials, but the discussion has been neglected on that side of the question which comes closest home to those of us who are not surgeons, and who see these cases after they leave the surgeon, sometimes years afterwards. I allude to cases of so-called post-operative neuroses. I have seen many of them, and have one under treatment now, in which the suffering seems to have been caused by some irritable focus situated in the uterus, which is partly removed. There is a tender mass in the situation of the remainder of this organ about the size of half a walnut. This patient was operated on six years ago, and since then she has been obliged to spend her mornings recumbent. I do not know what kind of sutures were used, and I merely wish to emphasize that there must be some reason why the surgeons are changing their suture material. I do not believe that non-absorbable material should be left in the body if it can be avoided. Something ought to be used that will disappear by absorption.

DR. CORDIER (closing the discussion)—The principal object of my paper was to call attention to the fact that we must not trust too much to nature in controlling hemorrhage. It is surprising how much we do risk in these cases when we would not think of risking anything in the axilla or popliteal space. Frequently, in abdominal operations, we let oozing go on and trust to nature.

Another point is the question of diagnosis. You find that they will frequently say that the patient was placed back on the table and the incision reopened in order to determine the existence of hemorrhage. This is useless. If the question is whether you have an intraperitoneal hemorrhage, it is necessary to have everything thoroughly sterilized and keep the patient in bed, so as not to disturb her. Clip a stitch and introduce a long sterilized forceps into the wound and detect the hemorrhage. That is the easiest and safest way in which to determine it.

I would never think of using a saline solution while the operation is going on, as the vessels are all widely open and it would simply increase the hemorrhage. However, the hot solution thrown into the rectum is very beneficial in these cases. It matters not what ligature material you use. We always find a diversity of opinion on that subject. A number of gentlemen have talked about absorbable material, and each one has a different opinion as to what should be used, and how. We are dealing with an uncertainty, as regards hemorrhage, when we tie a pedicle with catgut ligature. I have seen them absorb in three days, which is certainly too soon. In regard to the mass ligatures, I do not know how we can get around it; we sometimes have a very broad pedicle and time is an important factor. If you want to undertake and divide these tissues, picking out the individual vessels, you will take up a great deal of time. I do not see any reason why we should not use the mass ligature. One of the safe courses in the use of silk is to tie in a mass ligature, so that the structures will overlap the ligature, and the two surfaces above and below come in contact, and the pedicle remain alive. It will get up an anastomotic circulation, and the ligature will remain clean. When you get silk infected you can not tell what will become of it. The same applies to chromicized catgut, tendon, etc. I have seen it working out of a hernia case twelve and fifteen months after the operation, and I am sure that it is less certain than silk. Where you use silk, you do not have to dance around and see how to use it. Put on a good stout piece of sterilized silk, and in the majority of cases you will have no hemorrhage.

Hemostasis of the Liver.—Baldassari inserted wedge-shaped fragments of decalcified bone between the lips of the wound in the liver, in his experimental research on dogs. The wound was then sutured, including the intermediate bone in the stitches. When the animals were killed later there were no evidences of the slightest oozing of blood or hemorrhage from the wound, and the bone was absorbed, cicatricial tissue taking its place. The bones were rinsed in an acid, then in 50 per cent. alcohol containing a little sublimate, and finally soaked in a hot saline solution to remove the sublimate and soften them.

THE ADVANTAGES AND DISADVANTAGES OF DRAINAGE AFTER ABDOMINAL OPERATIONS.*

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If the short paper which I present to you to-day is productive of any good results, personally, I look for them not so much from the paper itself as from the discussion which I hope it will inaugurate—"many men, many minds." I do not expect that all my hearers will agree with the opinions which I have formed after some years' experience, and I trust that to-day the views of not a few will be freely expressed in order that the subject may be thoroughly thrashed out. In short it would seem advisable for us to hold what may be termed an "experience meeting" and my remarks may simply be looked upon as prefatory to what I hope may be a full and fruitful discussion. I shall speak briefly of work done by others and by myself sometime ago, and shall supplement this by my own experience in two series of cases, in the first of which there were 114 and in the second 108 consecutive, unselected, abdominal sections without a death.

During the past few years our ideas regarding the necessity for and the efficacy of drainage in abdominal surgery have undergone the most radical changes. Not so very long ago we did not venture to close the wound of any abdominal section absolutely but left in a large tube which reached well down among the tissues. It was then thought that infected cases—such, for instance, as pelvic abscess—could never recover without drainage, and that even in the cleanest cases it was always well to insert the tube for at least a few hours until the so-called serous oozing had ceased, in order not to tax too severely the absorptive power of the peritoneum.

In a paper published in 1890 I summarized the indications for drainage as follows: 1, to provide a means of escape for the serous oozing which follows the separation of broad adherent surfaces; 2, to guard against septic peritonitis from retained pus from the tube, ovary, or other viscus; 3, to remove fluid in cases of persistent capillary hemorrhage; 4, to provide against hemorrhage in cases of hysterectomy when the pedicle is dropped; 5, to drain the peritoneal cavity and starve out the disease in cases of chronic or tubercular peritonitis.

But after our attention had been called to the importance of taking more pains with the minute operative details; after we had recognized the necessity of checking all hemorrhage, even from the smaller bleeding points, of avoiding any infection of the field from the contents of abscesses or of the intestines, and of making a careful peritoneal toilette; above all, since we have understood the effects of any rough handling of the tissues, we have come to look upon the necessity for drainage as being the exception rather than the rule.

Again, in 1891, after having made a series of bacteriologic examinations of the secretions found in the drainage tube and upon the gauze placed in the tube for drainage, we became convinced that the drainage-tube was frequently the avenue through which septic infection took place. In many instances the fluids in and around the tube would contain few or no bacteria at the first examination, whereas upon a second or third examination many micro-organisms were found in the secretions thus examined. As a consequence of these and similar results the objections to the insertion of drainage-tubes were formulated by Professor Welch of the Johns Hopkins Hospital as follows:

"1. They tend to remove bacteria which may have gotten into a wound from the bactericidal influence of the tissues and animal juices. 2. Bacteria may travel by continuous growth or in other ways down the sides of a drainage-tube, and so penetrate into a wound which they otherwise would not enter. We have repeatedly been able to demonstrate this mode of entrance into a wound of the white staphylococcus found so commonly in the epidermis. The danger of leaving any part of the drainage-tube exposed to the air is too evident to require mention. 3. The changing of dressings necessitated by the presence of drainage-tubes increases in proportion to its frequency the chances of accidental infection. 4. The drainage-tube keeps asunder tissues which might otherwise immediately unite. 5. Its presence as a foreign body is an irritant and increases exudation. 6. The withdrawal of tubes left for any considerable time in wounds breaks up forming granulations—a circumstance which both prolongs the process of repair and opens the way for infection. Granulation tissue is an obstacle to the invasion of pathogenic bacteria from the surface, as has been proved by experiment. 7. After the removal of the tube there is left a track prone to suppurate and often slow in healing." To these Professor Halsted has added: 8. "Tissues which have been exposed to the drainage-tube are suffering from an insult which more or less impairs their vitality and hence their ability to destroy or inhibit organisms."

But besides increasing the chances of infection, drainage not infrequently gives rise to various post-operative complications. Of these Clark mentions, 1, obstruction of the bowel; 2, fecal fistulæ; 3, vesical complications; 4, post-operative herniæ.

When an abdominal wound became infected subsequently to an operation, it was formerly thought that this result was due to micro-organisms already present, it might be in a pelvic abscess or in the secretions about the uterine adnexa. Undoubtedly this mode of wound-infection may occur, but it should be remembered that in a very large proportion of the cases of pyosalpinx the pus found in the tubes or ovaries is sterile, any organisms which had before been present being dead. This fact has been proved many times by examination of smear cover-glass preparations and the study of cultures made at the time of the operation.

Moreover, in cases in which pus is found at the time of operation we must never forget the *vis naturæ medicatrix*, more especially when we are dealing with the peritoneum. It is a well-known fact, and one proved by the most conclusive experiments, that under normal conditions the peritoneum can dispose of pyogenic organisms in no inconsiderable quantities without the occurrence of peritonitis. Nor must it be forgotten that our drainage does not by any means always remove all foreign fluids and infectious matter, so that in not a few cases its employment will offer all the many disadvantages referred to above, without effecting our main object. Thus Clark says: "By the introduction of the drainage material the peritoneum is handicapped in three ways; 1, the normal peritoneal currents are disturbed, consequently the circulation of fluids and foreign matter toward the diaphragm is retarded; 2,

* Read in the Section on Obstetrics and Diseases of Women, at the Fifty-second Annual Meeting of the American Medical Association, held at St. Paul, Minn., June 4-7, 1901.

a reactive inflammation is set up about the drain, limiting and impeding the action of the peritoneum; and, 3, within a few hours the general peritoneum is cut off from all participation in the work of absorption by the wall of adhesions around the drain. In place of the natural agencies the work is thrown upon an agent which at best can only remove the fluid from a small pocket. The old illustration cited in favor of drainage, of the gauze wick emptying a bowl of water by capillary attraction, is delusive. The syrup-like serous or bloody fluid, which quickly coagulates and fills up the meshes of the gauze, almost entirely checks the capillary action. A limited quantity of fluid will be removed during the first two hours, but after that the drain acts like a plug by preventing the outflow of fluid, which then accumulates in the dependent pockets. In many instances we have found these encapsulated collections of infected matter within a half-centimeter of a drained tract."

The methods for prevention or the removal of infective material without the employment of drainage may be summarized as follows: 1, a thoroughly aseptic technique; 2, the controlling of all hemorrhage and oozing as far as possible; 3, careful manipulation, so that all unnecessary bruising of the tissues is avoided; 4, a perfect toilette of the peritoneal cavity; 5, the removal as far as possible of infectious foci; 6, the use of irrigations with salt solution; 7, if necessary the reopening and thorough cleansing of the cavity; 8, proper after-care of the patient.

In my clinic we have practically abandoned the employment of drainage in abdominal cases, and for the past seven years we have not used a glass drainage-tube. We have, however, drained by means of gauze on several occasions in which it has been impossible to control the bleeding, and also in those cases in which we have met with a rupture of the bowel during the operation, and it has been an exceedingly difficult task to close the tear.

If symptoms should arise after an abdominal section as the result of the absorption of septic material that has been introduced at the time of the operation, or from remnants of the original diseased foci, we have plenty of time, as a rule, to reopen the abdomen and wash it out again and then if necessary to institute drainage in order to prevent the absorption of more septic material into the general circulation. Such cases are, however, fortunately very rare, and if we employ drainage as a routine in order to anticipate such a condition, we run many risks of infecting the patient. In 222 consecutive cases we used drainage in only one instance, and in this case we punctured and drained through the vagina and also placed one piece of gauze in the lower angle of the incision in the abdomen. A large pus sac was present, which it was impossible to remove; it communicated with the peritoneal cavity and the vagina at the same time. In attempting to open the sac through the vagina an opening was also made into the peritoneal cavity, and since the sac would have drained into the peritoneal cavity we evacuated the contents by the vaginal puncture. Even in this case I do not consider that it was absolutely necessary to have drained through the abdomen.

With this single exception—in 222 cases—we have closed the abdomen in every instance, without drainage. In these two series of 222 cases we have met with pus in 65 cases (28 per cent.), varying in quantity from a few cubic centimeters to several liters. After having drained from 15 to 75 per cent. of cases previous to 1893, and for the past seven years having practically abandoned drainage, my observations lead me to emphatically state that patients certainly, as a rule, do very much better if drainage is not used. Not only have the immediate results been better, but the ultimate results, such as the occurrence of hernia and intestinal adhesions, have been avoided.

ACTINOTHERAPY IN CUTANEOUS MEDICINE —A PRELIMINARY COMMUNICATION.

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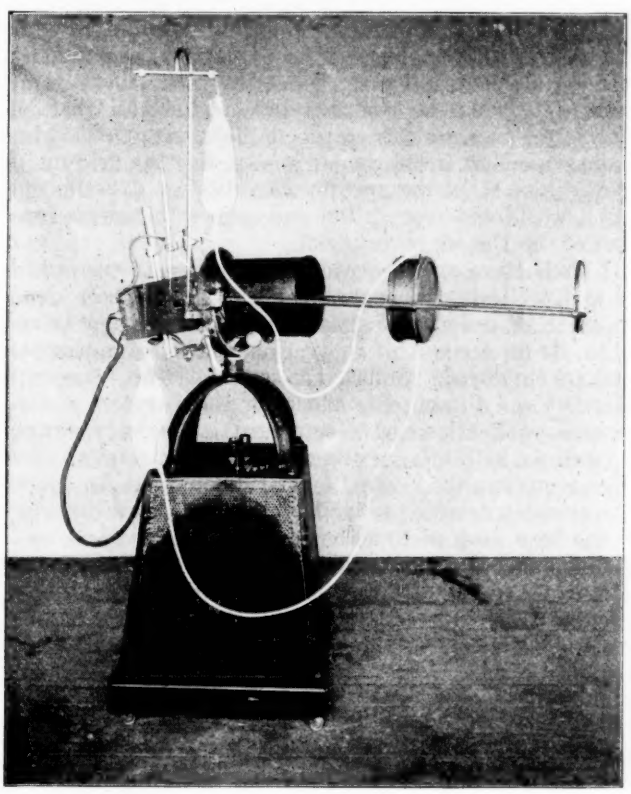
NEW YORK CITY.

The employment of light as a therapeutic agent is no new thing in medicine. The best term to employ for the treatment in general is Phototherapy. The use of that especial form, the discovery of which has immortalized the name of Roentgen, is generally known as Radiotherapy. Actinotherapy seems to be the most suitable designation for the employment of the ordinary



THE ACTINOLYTE.

sun or arc light, or portions of their rays. It is to this latter that I desire to call attention.

To go no further back than the time of General Pleasanton, most of us recollect the "blue glass craze" that swept over the land. Wonderful therapeutic results were attributed to its use; and isolated specimens of the blue glass panes that then appeared in so many windows may still be seen. But Pleasanton and his followers truly saw "as through a glass darkly"; their method was not only empirical, but was developed largely by persons who had no medical knowledge; and it never, therefore, obtained the general recognition of the profession.

The bactericide action of light is now an established and well-known fact. Cultures of many virulent and pathogenic microbes die in a short time when exposed to properly concentrated light. Axel L. Larsen[1] has

1. Mittheilungen aus Finsens Medicinske Lysinstitut, 1900.

lately gone over the ground again with the pus organisms, the colon and typhoid bacilli, etc., and has endeavored to determine with exactitude the time required to weaken and destroy them with given concentrations of light.

But this is by no means its only action, and probably not even its chief one. It irritates the cutaneous nerves and so affects the central nervous system. It increases the oxidation processes in the cells and the amount of hemaglobin in the blood. The heightened tissue metamorphosis is possibly the factor on which its future therapeutic application will be based.

The ordinary phenomena of transillumination show that light penetrates the skin. Contact photographs have repeatedly been made by means of light that has passed through the human body, notably by Kime, of Fort Dodge, and H. L. Mason, of New York. Glass tubes containing sensitive silver salts have been introduced under the skin of animals, and have shown the characteristic effects of light penetration on removal.

To Niels R. Finsen of Copenhagen, however, belongs the credit of developing the light treatment and placing it upon a scientific basis. Since the time, now several years ago, when he recorded the good effects that he had gotten in variola from the employment of red light, he has been an indefatigable worker in this field; and to-day his Actinotherapeutic Institute in Copenhagen has a world-wide reputation and enjoys the active support of the Danish government.

I shall leave out of account, as foreign to the object of this preliminary paper, the work that has been done in other than dermatological fields with the new treatment, or an account of the various forms of apparatus that are employed. Suffice it to say that Helm,[2] Gerson,[3] Morris,[4] and Finsen, Bie and their collaborators in numerous publications have employed it in many varied dermatoses with a large proportion of good results. Besides lupus and the various dermal tuberculoses, in which it is possibly destined to be the treatment par excellence, it has been used in lupus erythematosus, psoriasis, epithelioma, acne vulgaris, rosacea, alopecia areata, eczema, ringworm, contagious impetigo, and various ulcerations, with success.

Either sunlight or the electric arc can be employed; but the former is too uncertain in most parts of our country to be relied upon. The chemical or actinic rays of the more refrangible end of the spectrum are the elements from which therapeutic effects may be expected; and we have fortunately in the electric arc a source of light which is accessible in all our large centers at any time, and which is especially rich in them. Sunlight is cheaper, of course, but it is only in regions like California or New Mexico, where it can be relied upon for a great part of the year, that the expense of installing a sunlight apparatus would be warranted. The arc light can be employed on cloudy days, or in the evening, and this leads me to mention and dispose of one apparent disadvantage of the process.

The actinotherapeutic treatment takes time; of that there can be no doubt. But I am convinced that it does not even now require the hourly sessions every day which Finsen gives his patients. Were that the case, then, no matter what its advantages, it would have to be relegated to institutions where the necessary elaborate arrangements for the simultaneous treatment of a number of patients could be made. Increase of the amperage employed, and the reflexion and concentration of all the available rays upon the area to be treated has enabled me already to reduce it very materially, and I have no doubt that further progress in that direction will very shortly be made. I now give half-hourly sittings every other day. The question is solely one of actinic light intensity.

I employ the instrument manufactured by a firm of this city, and called by them the Actinolyte. It consists essentially of an arc light with the necessary arrangements for automatic action, enclosed in an iron hood. In front of the arc is a double convex condenser, adjustable for focusing purposes by means of a rack and pinion. On rods that project in front from each side of the hood is a double convex focusing lens, also adjustable. By means of these condensers a circle of light of any size can be readily obtained; of course the smaller it is the more intense is the illumination. The hood is swung in such a way that it can be raised or lowered, and swung laterally and vertically, thus making it possible to project the light spot with exactitude upon the area that is to be treated.

On the front bars and between the hood and focusing lens is a cell for the purpose of containing the fluid to cut off the heat rays. This can be filled with distilled water, or methylene-blue or alum solution, or it may be connected with the two water-bags for which arrangement is made, so that a continuous stream of heat-absorbing fluid may flow through the cell. So far I have found plain cold water without continuous flow quite sufficient to prevent any unpleasant heat effects from the concentrated light.

The base of the instrument contains a suitable rheostat, with a selector on top. Either the continuous or alternating current may be employed, and from 25 to 55 amperes of current can be used. The candle power varies, of course, with the amperage. With a concentrated circle of light it runs from 20,000 to 60,000.

I am not prepared as yet to make a definite statement of the results obtained with the treatment, save in two cases. In one extensive lupus vulgaris they promise to be brilliant. The one area that has been treated, some 2 inches square, presents a marked contrast to other locations where the disease is progressing. It is almost white, only two or three lupoid nodules remain, and they are disappearing. This has been accomplished without ulceration, or even inflammation, the process has been entirely one of interstitial absorption. All the other areas are characteristically infiltrated and scaling. The patient has had absolutely no other treatment.

The second case was one of obstinate tertiary syphilitic ulceration of the leg. The light had an apparently good effect in stimulating the indolent glazed ulcer, so that it is now nearly healed, after resisting other internal and local treatment for weeks.

The advantages of the method are: 1. It is eminently conservative. It causes no radiodermatitis, ulceration, or loss of hair, such as too often, though sometimes necessarily, occurs under the Roentgen treatment. I do not know of the record of any serious trouble from its employment. Finsen rightly lays stress upon this point, and to dermatologists it is of especial importance, since many of the affections that they are called upon to treat occur upon the face. 2. It is entirely painless. This is a great desideratum, more especially in dealing with women and children. 3. It is effective. New as the method is, there is already concurrent testimony from a sufficient number of competent observers to

2. Deutsche Medicinal-Zeitung, No. 100, 1900.
3. Archiv für Lichttherapie, 1, No. 3.
4. British Journal of Dermatology, August, 1900.

demonstrate that we possess a powerful therapeutic agent in concentrated light.

Leaving to others the study of the effects of actinotherapy in the general conditions and affections of the internal organs in which it may prove useful, it is to be presumed that by dermatologists it may be employed in the various skin affections that are dependent upon micro-organic or parasitic infection, or where increased tissue metamorphosis is a desideratum. Lupus vulgaris, lupus erythematosus, mycotic eczema, trichophytosis, favus, impetigo, furunculosis, tuberculosis cutis, epithelioma, mycosis fungoides, blastomycosis, actinomycosis, and similar affections are the diseases in which it is likely to prove useful.

144 West Forty-eighth Street.

A NEW OPERATION FOR REMOVAL OF CANCER OF THE RECTUM.*

MATTHEW D. MANN, A.M., M.D.

BUFFALO, N. Y.

The situation of the rectum, placed as it is deep in the bony pelvis, makes it very difficult of access for surgical purposes. Thus far, three routes have been proposed for its removal. As yet no definite decision has been arrived at as to which of these is the best. Each has its advantages and disadvantages, and each has its advocates. The posterior operation, as Murphy very properly says, is difficult, dangerous, and in many respects unsatisfactory; the mortality, he quotes as 21.2 per cent.

The latest proposal for professional favor is that made by Dr. J. B. Murphy.[1] His operation is the resection of the rectum through the vagina. Although the idea of operating by this route is not original with him, yet for the perfected form of the operation we must give him the credit. Murphy's operation seems to have many advantages over the transsacral method. There are no objections attending it except the technical difficulties. These must be very great, but differ, no doubt, with different cases. In an old nullipara they must be almost insurmountable; but when the vagina is roomy and the growth quite low in the rectum, it is probably the best operation which has yet been suggested.

Curiously enough, nobody has yet proposed the resection of the rectum from above.[2] The nearest approach to it which I have been able to find, is the operation done by J. Price, in which, after removal of the neoplasm, he has united the cut end of the rectum with the vagina. This necessitates defecation through the vagina without any sphincter to give control.

The plan which I have to suggest is suitable for cases in which the growth is too high to be easily reached through the vagina, and has the great advantage of leaving the sphincter intact and the movements of the bowels in their natural course uninterfered with. The possibility of the operation depends on the fact that, by the aid of the Trendelenburg position, the pelvis can be emptied of all the intestines, even the rectum and the sigmoid. This gives plenty of space to work, and makes the operation possible.

I was first led to do it by a mistake in diagnosis. A patient came to me with a small mass behind the uterus. She complained of some difficulty and pain on defecation. I thought the mass, which was freely movable, was a prolapsed ovary, as it was about the right size, and that the pain in defecation was caused by the pressure upon the ovary. I, therefore, opened the abdomen with a view to the removal of the ovary; but, on passing my finger into Douglas's pouch, I was surprised to find nothing there. While palpating the parts, I discovered the growth in the rectum. I determined at once to resect, believing that the growth was probably malignant and the cause of her trouble. After removing the growth, I found very great difficulty in sewing together the cut ends of the rectum, but finally succeeded quite easily in placing a Murphy button. Then, with one finger in the rectum and the hand in the pelvis above, I had no trouble in uniting the two halves of the button.

The patient made an uninterrupted recovery, and was examined some time after her return home, and found to be in a perfectly healthy condition.

An account of this operation was published in the *American Medical Quarterly* for 1899, as well as the history of two other cases. In that paper I drew attention to the abdominal method of attacking carcinoma of the rectum, but it does not seem to have attracted any notice. I shall,therefore, draw somewhat upon what I have written before, especially upon the reports of cases.

The second case on which I operated was one of stricture of the rectum due to inflammatory exudate. I had previously resected the patient's small intestine, and one year later she came with a recurrence of the old symptoms. At the time of the first operation, I had noticed inflammatory trouble in the pelvic cavity, but her condition did not warrant its removal. I diagnosed stricture from this cause, and proceeded to resect the rectum at the very bottom of the cul-de-sac, exactly as in the case before. In this case the button came away on the eleventh day, and convalescence was complete. The patient has remained well up to the present time, a period of three years.

My next case was not so fortunate. There was a large mass behind the uterus, half as large as one's fist. On opening the abdomen, I found the mass adherent to the posterior wall of the pelvis. It was easily loosened, and in the Trendelenburg position was cut away, both above and below, and four inches of intestine resected. No difficulty was found in pulling up the rectum and in placing a Murphy button. With the finger of an assistant in the rectum, to steady the lower button, the two halves were easily pushed together. A glass drainage-tube was placed from above, the pelvis having been previously thoroughly washed out with salt solution.

The patient did well for four days. During my absence from town attempts were made to remove the button, but were unsuccessful. Following this the patient developed a general peritonitis, from which she died.

Since this case, I have had two others, both of which were successful. In one of them the growth extended below the posterior edge of the cervix uteri. In order to get it out, it was necessary to cut the peritoneum at the bottom of Douglas's pouch, and to pull the rectum up above its peritoneal investiture. The difficulties of placing the lower half of the Murphy button were greater than in the other cases, but did not offer any insurmountable obstacles. In this case the disease recurred within eight months.

* Read in the Section on Obstetrics and Diseases of Women, at the Fifty-second Annual Meeting of the American Medical Association, held at St. Paul, Minn., June 4-7, 1901.

1. Phila. Med. Jour., Feb. 23, 1901, p. 383.

2. The operation of W. R. Pryor (Gyn. Trans., 1900), although done partially through the abdomen, is for carcinoma of the vagina and rectum, and is, therefore, applicable to a different class of cases.

The last case was about the same as the previous one, the carcinoma being easily reached by the finger in the rectum. The patient remains well at present, after a period of five months.

The technic of the operation, as I have now developed it, is as follows: The rectum and vagina should first be thoroughly cleansed. The abdomen being opened, and the patient placed in the Trendelenburg position, the rectum just above the growth is clamped with a long hemastatic forceps and cut off. The sigmoid flexure and rectum are then pulled out of the pelvis, the meso-rectum being slightly cut away if necessary. This leaves the pelvis entirely free for manipulation of the lower end. If the growth be above the peritoneal investment—that is, above the bottom of Douglas's pouch—it should be cut off low enough to secure all the malignant tissue. The diseased portion is then entirely removed, all bleeding vessels being tied. One or two large arteries usually show themselves at this point. The lower end of the rectum is next seized and drawn up, care being taken not to injure it, as it is very easily torn. It is surprising how much this can be pulled up, and how easily it can be manipulated. It has no peritoneal envelop. There is no difficulty in getting plenty of slack to pull down that portion of the rectum above the resection, even after several inches have been removed, for, as Murphy has correctly stated, "the normal position of the sigmoid is in the pelvis, and not in the left iliac fossa, as is generally supposed."

With a short, round, curved needle—the Emmet vesicovaginal fistula needle is the one I use—a silk suture can be run around the end of the gut. The Murphy button is then placed, the piece with the long projection being preferably put in this position. After this step is completed, the other end of the button is placed in the upper cut end of the intestine and the two are brought together. To accomplish this, the lower end of the button must be held by one or two fingers of one hand in the rectum.

If thought advisable, drainage through the posterior cul-de-sac into the vagina may be made, and a rubber drainage-tube placed in this position. In my last case I resorted to this expedient, and believe that it is a valuable addition to the technic of the operation. The abdomen is closed in the usual way.

If the growth extends below the bottom of Douglas's pouch, the peritoneum must be cut close to the uterus, and the incision carried around the rectum. The rectum, with the portion of peritoneum adherent, can then be pulled well up and incised below the growth. The deeper the growth the harder it is to place the Murphy button; and if the growth extends down as low as the level of the external os, then the difficulties will be found to be very great. This, however, should not weigh, because all operations on the rectum are difficult, no matter what the way of approach may be.

I use the Murphy button for the reason that the making of a tight joint by sewing down in the bottom of the pelvis I find to be very troublesome. It may be objected that where the button is placed in the rectum deprived of its peritoneal envelop, union will not take place. I find, however, that this objection is not valid, as in three of my cases the button was applied to the portion of the rectum below the resection, where it was denuded of peritoneum, and yet two were successful.

The cases in which this operation would seem to be especially indicated are those in which the growth is all above the bottom of Douglas's pouch, though I would not restrict it wholly to such cases. The nearer to the brim of the pelvis, the stronger are the indications for the operation. In one case—a man—I resected in the sigmoid, using the button as before. This, however, I do not count among the cases of resection of the rectum.

Senn, in his work on intestinal surgery, states that resection in the bottom of the pelvis is impossible, and that, for the same anatomic reasons, lateral anastomosis can not be made. My cases would seem to show that Senn's estimate of the difficulties of resecting deep in the pelvis is too high. The Trendelenburg position and the button have made a great change; without them the operation would not be feasible. The usual objections to the button certainly do not count here, as in most cases it is within easy reach, and can be extracted if it does not come away of itself. In my last case I was obliged to remove it, as it seemed to settle into a kind of a pocket and to show no disposition to come away, the bowels, however, moving freely through it.

An instrument which I have found to be of great use in this, and in other operations where the patient is put in the Trendelenburg position, is the self-retaining retractor. In a favorable case, with a moderately long incision, the way in which the interior of the pelvis is made accessible to sight and touch is remarkable.

The Cleveland operating-table is another adjunct which is a great help. This table is so arranged that the operator has easy access to the vagina and rectum while the patient is in the Trendelenburg position.

My friend, Dr. Eugene Smith, surgeon to the Buffalo Charity Hospital, after having seen me operate, has performed the operation once, on a man, and reports that he met with no special difficulties, and that he is pleased with the procedure.

If called upon to limit the indications for this operation, I would say, do Murphy's operation when the lower edge of the growth is less than about one and a half inches from the inner edge of the anus, and in all other cases open above and resect.

I do not claim that this operation is easy under the best of circumstances, but what operation for carcinoma of the rectum is? However, I do maintain that it is feasible and that it gives the best chance to make a clean and complete removal of the neoplasm, and will, therefore, in proper cases give the best attainable results.

DISCUSSION.

DR. HENRY O. MARCY, Boston—I have had no experience in the resection of the lower bowel through an abdominal section. In 1893 I resected the sigmoid for cancer, uniting the segments by a large-sized Murphy button. It came away the twelfth day. I removed a portion of the sacrum and entered the peritoneal cavity from below. The patient died the following year from a return of the disease. This was, so far as I know, the first time the Murphy button had been used in the resection of the lower bowel. My friend, Dr. H. O. Walker, of Detroit, had suggested to me this method of approximation.

DR. J. WESLEY BOVEE, Washington, D.C.—I heard Dr. Edebohls read his paper on this subject. The operation was done in a case of cancer of the rectum associated with a pregnant uterus. The operation was preceded by an abdominal hysterectomy, and I would suggest in doing this work in women that a hysterectomy will in most cases be advantageous, inasmuch as it gives the larger field of operation. Dr. Edebohls' case was a successful one. I believe Dr. Mann's conclusions are correct. These cases where the cancer is fairly well up do better by being removed from above than from below.

DR. MANN, closing the discussion—The subject can not be discussed, as most men have had no experience with it. I think

Dr. Edeboh's' suggestion may be of service in some cases by giving a larger field of operation, but in a case of a small uterus I do not think it would be sufficiently in the way to make its removal necessary. A pregnant uterus would, of course, be very much in the way.

THE ACCIDENTS AND COMPLICATIONS OF PELVIC SURGERY AND THEIR TREATMENT.*

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PHILADELPHIA.

The necessity for a thorough knowledge of the pelvic viscera, their topographical relations, and the pathology of their diseases, is of paramount importance in dealing with the diseased organs intelligently.

The ordinary procedures of complicated pelvic operations may cause so much damage that even the expert may be taxed to the utmost in dealing with them, e. g., the enucleation of an adherent intraligamentary cyst, or where one or other ureter is involved, a careful dissection may be necessary to free it. The ureter may be damaged to the degree that repair can only be accomplished by an anastomosis, or implantation; or where there is troublesome bleeding, for the control of which the uterine arteries may have to be exposed.

The common occurrence of adhesion, the result of inflammatory process involving the pelvic viscera, are of sufficient importance to call for our careful consideration.

The character of the adhesions vary; some are easily separated, while the old and organized ones will call for considerable manipulation to liberate them.

In this connection, the writer begs to state that only by thorough work can the patient be expected to recover, by which, I mean, get permanently well and remain well. The bane of the abdominal surgeon is the formation of post-operative adhesions, therefore it goes without saying, the fewer left at operation, the better the patient's chances against post-operative pain, etc. The ability to do better, safer and more thorough work by the abdominal than by the vaginal route can not be better demonstrated than by raising the question of the importance of disposing of all adhesions in any given case. The vaginal operation has been spoken of as "the dismal swamp procedure," and rightly, too, I think.

I fear that too many operators are content with simple removal of the lesion. This is only makeshift work. A true artist does not consider a piece of work done until finished, that is, until the structures involved in the disease have been returned to their normal condition, or as nearly so as finished surgical technique can accomplish it. The evacuation of a collection of pus in the pelvis by vaginal puncture, or the evacuation of an appendiceal abscess by simple incision, or the removal of stones from the gall-bladder, leaving a stone or stones in the common duct, can in but few cases be sanctioned by the surgeon. The thorough liberation of adhesions, the covering in of abraded or torn surfaces by peritoneum, I can not be too strong in advocating, for I see many patients who suffer from incomplete work, to conscientiously do otherwise. To finish up a case by undoing the bad work of a previous operation speaks for itself. I am sure, too, that many cases which are subjected to incomplete operation had better not have been operated at all, as the last state is worse than the first. The practice of filling the abdominal cavity with normal salt solution, does not, in my judgment, prevent adhesions, as it is too quickly absorbed.

The pelvic wall, floor, the rectum, sigmoid, cecum, vermiform appendix, small bowel, omentum or mesentery, bladder, ureter and uterus may be involved singly, or they may all be included in an inflammatory mass or in conjunction with and adherent to a tumor.

The breaking up of adhesions involving the pelvic walls or floor does not entail as great a liability to serious injury as is likely to occur when freeing the viscera; I will, therefore, merely mention the method employed in dealing therewith. The parts having been thoroughly exposed, a point is selected which seems to offer the best point to attack the mass of adhesions and an attempt is made to peel them off, which, in some instances, is accomplished without much difficulty. In others the mass can only be broken through after considerable force has been exerted. Again, it may be found necessary to divide the adhesions with a scalpel.

The terminal portion of the sigmoid flexure, but more particularly the rectum, both from the depth of the latter and its small range of mobility, offer great difficulties, in the process of enucleation, from a mass of adhesions or from a growth, and owing to its fixed position does not permit the same freedom for manipulation as does the sigmoid flexure above it.

In adhesions to these viscera an effort is made to find some point of attack, as in separating adhesions of the wall or floor of the pelvis and working gently away from the imprisoned bowel, which at times, even with the utmost caution observed, is torn, owing to its softened condition, from the inflammatory process. If the bowel has been torn, or the integrity of its wall impaired, the rent should be closed at once, or if too large to permit of this, the opening must be temporarily plugged with gauze until the remaining portion of the operation is completed, when the gauze plug is removed and the opening packed off from the peritoneal cavity with gauze, the gauze end being brought out at the lower part of the abdominal wound, thus favoring the establishment of a fecal fistula. It has been suggested under these circumstances to divide the bowel across and invaginate the proximal end into the distal end, retaining it by a continuous Lembert suture. This I have practiced when the distal end of the bowel was not softened to a degree which would render the procedure useless.

The sigmoid, like the rectum, is liable to be included in an inflammatory mass, but not to the same extent. Adhesion of this portion of the alimentary tract occurs in connection, most commonly, with pelvic tumors, fibroids of the uterus, ovarian or parovarian cysts and some cases of pyosalpinx. Extensive injury of the sigmoid flexure or of the mesosigmoid should not embarrass the operator, as resection and end-to-end union is easily done. The omentum, on account of its wide area of distribution, will be found adherent in a large percentage of the cases requiring abdominal section. It is often found surrounding a purulent collection, or forming a part of its limiting wall, or spread out fan fashion and attached to a pelvis mass. It is, therefore, safer to ligate the adherent structure previous to its separation, with preferably silk ligatures. The omentum is not ligatured en masse, but in sections. In dealing in this manner with the great omentum in elderly people, where the blood vessels have undergone senile change,

* Read in the Section on Obstetrics and Diseases of Women, at the Fifty-second Annual Meeting of the American Medical Association, held at St. Paul, Minn., June 4-7, 1901.

it is of the greatest importance to include in the ligature but small sections, thus lessening the chances of secondary bleeding.

The small intestine and the mesentery are frequently found adherent to a pelvic mass. This is particularly so in the acute inflammatory diseases of the Fallopian tubes, and of the vermiform appendix. It is not unusual to find the small bowel and its mesentery forming a part of the abscess wall, especially in the iliac fossa.

When the adhesions are filamentous they may be broken up with impunity; where, however, they are spread out over a broad surface, as is seen when extensive plastic exudate has become organized, then the dissection must be carried out with care, to avoid tearing the bowel.

Injury to the peritoneal coat of the bowel does not, in itself, present any formidable condition, but where the muscular coat has been torn an effort should be made to suture the torn coat together, providing that the caliber of the bowel will not be impinged upon too much.

The bladder when in its normal relation is frequently found adherent to the omentum, and presents but few difficulties in the disposal thereof; ligatures applied successively one after another until the omental mass has been securely tied off and removed, will dispose of this complication.

A bladder adherent to the prolapsed fundus of a uterus and adherent to some other pelvic viscus will at times present a difficult problem to solve, and a tear under these circumstances is more likely to occur than under any other condition. If the peritoneal coat is torn a few interrupted sutures will close the torn surface; if the cavity of the bladder has been opened a series of fine silk sutures closely applied, including the peritoneal and muscular coats alone, will, in the majority of instances, suffice. After the repair of a complete rent in the bladder wall, the organ should be distended with a boric acid solution, or with normal salt solution, to determine if the wound has been securely closed.

The displacement upward, to which the bladder is liable in the presence of a large growth or cyst, makes it possible to injure that viscus in making the abdominal incision.

The ureter, unlike the other occupants of the pelvis, being behind the peritoneum, is not liable to adhesion, except from subperitoneal growths, and is, therefore, not nearly so likely to be damaged. It is most often damaged in the course of an operation for the removal of a large uterine fibroid, and particularly in the application of the ligature to the uterine artery. It is also liable to injury in the process of enucleation of a large parovarian or intraligamentary cyst or growth, particularly if the ureter overrides a portion of the tumor, and is masked by a mass of superimposed lymph. Preliminary catheterization aids in avoiding this accident.

The uterus and its adnexa form the origin of the bulk of the pelvic tumors that attain sufficient proportions to produce distortion of the other pelvic viscera, or occasion serious complications in the attempt at their removal. The complication incident to tumors of the uterus may be summed up into those which are due to the growth in the uterus, to pyosalpinx, ovarian or tubo-ovarian abscess, suppurating dermoid, a sloughing fibroid, or even suppuration within the uterus itself.

Peritonitis in association with fibroids is rare in comparison to that of ovarian tumors and the inflammatory affections of the uterine appendages. Following an attack of peritonitis, there may be, and frequently is, an agglutination of the pelvic viscera, and the first of these to receive the benefit of the inflammatory process is usually the tubes and ovaries, which become tied down, either to the uterus or to the pelvic walls or floor. The difficulties encountered in delivering some large growths are familiar to all, and in many instances this is occasioned by the adhesion of the tubes and ovaries to the pelvic wall or floor, and it is often impossible to deliver the tumor into the wound until they have been freed. In addition to the adherent tube and ovary, on the right side, an adherent appendix or cecum may add to the difficulties of the case, while on the left side the same may be true of the sigmoid.

If, in connection with the above complications, pus is present, it is only after the most careful walling off of the peritoneal cavity that any attempt should be made to remove the uterus with its tumor.

In addition to the bowel complications, the ureter will be found displaced in some instances to the degree of overriding a part of the fibroid, tumor or inflammatory mass. If the ureter is recognized before an attempt is made to deliver the enlarged uterus, or prior to the ligation of the ovarian vessels, it will be a very simple matter to dispose of the peritoneum so as to free the ureter and lift it out of the way to a place of safety until the fibroid uterus has been disposed of.

The vermiform appendix when adherent to the uterus is disposed of by the removal of the appendix, excising it from the cecum and closing the opening in the bowel with continuous Lembert sutures.

The removal of cysts, and inflammatory masses, while presenting difficulties in the shape of extensive adhesions to the pelvis and to adjacent viscera, do not offer the same difficulties, owing to the fact that a portion of the growth, if not malignant in nature, can be left behind if there is any danger of doing too much damage to the structure to which it is attached. When a large cyst of the ovary is intimately adherent to the bladder, bowel, or to the pelvic wall, and there is danger of tearing the bowel, bladder or ureter, a small portion of the cyst wall can be left behind, searing its cut surface with the cautery to prevent oozing from its cut surface.

Malignant growths of the uterus and its adnexa, or of the alimentary tract contained in the pelvis, or of the bladder by the extension of the malignant process beyond the primary seat of invasion are inoperable cases.

The most common complications of rupture of an extra-uterine gestation have been, in my experience, hemorrhage, adhesions and appendicitis. Of the former much can not be said, other than it is necessary to rapidly discover the bleeding point and secure it with a ligature. Upon opening the abdomen of a case of ruptured extra-uterine pregnancy large quantities of blood and clots make their escape from the incision, and as rapidly as possible the affected tube should be seized, brought into sight and tied off, subsequent to which the blood and blood clots can be removed. If the rupture has occurred some time previously and the mass has become adherent to adjacent coils of intestines, then as much of the mass can be removed as will not interfere with the integrity of the bowel. If the placenta has become firmly attached to the intestines it is safer not to attempt to remove it, but to wall it off with gauze and allow it to separate spontaneously.

When appendicitis and extra-uterine pregnancy are

found present together the latter usually involves the tube of the right side. It is only in the presence of a sepsis that much danger can accrue from the combined lesion. Here the danger of an infection of the general peritoneal cavity can easily take place, and only the most careful protection of the general peritoneal cavity by gauze packing, isolating the right iliac fossa completely, will secure immunity from infection.

Of all the serious pelvic conditions to which the surgeons are brought face to face, purulent collections in the pelvis, especially those of appendical origin, are, in the writer's mind, the most dangerous and trying ones to deal with. The immediate danger to which the patient is subjected, and the liabilities of remote consequences, make this probably the most important question in abdominal surgery to-day. To decide upon the best means of preventing infection of the peritoneal cavity and the proper disposal of the pathological lesion requires that the surgeon not only possess the utmost skill, but the greatest experience in this class of work.

The source of abdominal hemorrhage following the removal of some pelvic lesion is at times difficult to discover and to control; if, however, the intestines have been kept free from the field of operation by gauze packing, there should not be very much trouble to discover the bleeding points and secure them with ligatures.

The points where hemorrhage is most likely to take its origin are, from the omentum, the ovarian, uterine, the appendical and the mesenteric vessels.

The most serious complication of the removal of uterine fibroid is hemorrhage, therefore, why one of our most prominent abdominal surgeons clings to the extraperitoneal treatment of the stump. Myomectomy, while applicable to a few cases, is doubtless open to the same objection. We will agree that post-operative peritonitis ranks highest in the fatality of pelvic operations. In the absence of infected lesions peritonitis should not occur, yet with all care it unfortunately continues to cost a small percentage of lives. Simple, thorough technique, including the use of rubber gloves by all who assist at the operation, offers the patient the safety against this dangerous complication. The gloves should be worn throughout the operation and not taken off when a difficult part of the operation is reached.

A recital of the accidents and complications of pelvic surgery would be incomplete without touching upon the danger of and accidents due to operations on the uterus per vaginam consequent to a dilatation and curettage or to a repair of a lacerated cervix.

Before any operative procedure on the uterus or cervix is attempted there should be some very strong indications calling for its performance, and what is of greater importance, the absence of any pathological condition of the tubes or the ovaries must be eliminated. The existence of a salpingitis, a pyosalpinx, or of adhesions, would be the strongest contraindication to any measures for operation per vaginam, unless an abdominal section was contemplated in connection therewith, so as to be able to deal with the intra-pelvic conditions at the same time.

The possibilities of introducing a peritoneal infection by means of the comparatively harmless procedures which the average family doctor and occasional operator considers his province, dilatation, curettage, or a repair of a torn cervix, can only be appreciated by those who see the numerous invalids and physical wrecks consequent upon these very harmful measures.

Let us consider the accidents which may occur in the simple operation of curettage: Perforation of the uterus, the lighting up of a salpingitis, the breaking up of adhesions and the ever present danger of peritonitis. Let me state here that the liability to perforation of the uterus, even in the hands of the most expert, is great, and that in some instances this occurs so unexpectedly that a loop of bowel may either be torn or dragged down into the uterus before a perforation is even suspected. I have seen several instances of this kind, where patients were brought to the hospital with severe uterine hemorrhage and a loop of intestine found prolapsed into the cavity of the uterus, calling for an immediate abdominal section to restore the bowel to the cavity and to repair the perforation of the uterus.

The importance of observing thorough asepsis in any operation per vaginam is imperative if we wish to eliminate the infections. When we consider the great opportunity for infection from an active or latent gonorrhea, from the presence of the many micro-organisms found in the uterus, and the possibility of opening up new fields for their activity as a result of the exposure of fresh surface by the use of the curette, it is remarkable that there are not more cases of salpingitis after this dangerous operation. The mucous lining of the Fallopian tubes is continuous with the lining membrane of the uterus, and the same condition often exists in the tubes as is found in the uterus; it is, therefore, not only a useless procedure but a most harmful one in most cases, to curette the cavity of the uterus without being able to correct the disease in the Fallopian tubes. The practice of plugging the uterine canal with gauze for purposes other than drainage is vicious and is a prolific source of salpingitis.

The same objections and dangers are attendant upon dilatation of the cervix uteri as in curettage. This operation has a limited field of usefulness and is indicated only in those cases of dysmenorrhea which are not associated with tubal or ovarian disease, pelvic inflammation or of fixation of the uterus. The operation is a disappointing one in many instances, and the dangers of lighting up a latent pelvic lesion so great that I would class this as a dangerous procedure, and not to be attempted by those who are unfamiliar with ordinary pelvic technique, on account of the necessity for thorough surgical cleanliness and the ability to recognize the various pelvic lesions, whether acute or latent, which contraindicate the operation of dilatation.

The treatment of a lacerated cervix, to my mind, calls for as great a display of good judgment and skill as does any of the major operations on the pelvic viscera. Here again we have the same possibilities and risks to contend with as in the operation of dilatation and curettage, viz., the lighting up of a salpingitis, of a peritonitis or some peri-uterine pelvic inflammatory process. In the absence of any contraindications from the pelvic viscera, tubes or ovaries, and with the condition of the laceration of the cervix warranting interference, the operation, being done under strict aseptic precautions, is generally under these circumstances not unattended by danger, if we are not careful to leave sufficient room in stitching up the laceration to permit free drainage of the uterine canal, and I may add that this is one of the most fruitful sources of subsequent salpingeal disease.

DISCUSSION.

DR. FRANK CARY, Chicago—I wish to ask the Doctor whether he said that he did not believe that there are any cases of women who have borne children and have not a lacerated cervix.

DR. DEAVER—I did.

DR. CARY—Then I wish to say that either the gentleman has had a very limited experience, or his patients have been exceedingly unfortunate in their obstetricians.

DR. PHILANDER A. HARRIS, Paterson, N. J.—I have established to my own satisfaction that a certain number of cases with pus in the pelvis can be operated on more easily and cured more rapidly per vaginam. It is not easy to judge just what cases can be most safely operated on from below, but those who do a great deal of vaginal section work for puerperal sepsis are in a better position to judge. Occasionally you find exudates which appear rather suddenly and which may, or may not fluctuate, and yet, if you make an incision in the cul-de-sac, you effectually reach and discharge the pus, and the patient is symptomatically cured. We know that unless our incision has been properly made, we have afforded our patient only temporary relief. No person who has not employed this method, and who has not had a great deal of experience with it, has any right to condemn it. He who has had experience with it will recommend it. I am well satisfied that I have lost two cases by operating from above, which I might have saved by operating by the vaginal route. One, a case of pelvic hematocele which I saw five weeks after the rupture of a tubal pregnancy, had a clot which was so firmly organized that I could not distinguish it from a fibroid tumor, which the pelvis also contained. I operated by suprapubic section, and opened the hematocele, in the interior of it were two or three ounces of pus. That patient died very quickly from sepsis. If in that case I had made only a vaginal section, I would have had no trouble in recognizing the conditions present. I would have reached the cavity of the hematocele, discharged it through the vagina, stopped the considerable sepsis, and she would have been afforded a good chance of getting well.

DR. FRANK WARNER, Columbus—I understood Dr. Deaver to say that many cases of lacerated cervix are operated on which should not be. As highly as I esteem Dr. Deaver, I must say that this is vicious teaching. We are apt to go home and leave many of these cases alone that should be operated on. Dr. Deaver has had a wonderful experience in abdominal surgery, but I question whether his experience has been broad in obstetric work. What harm do these operations do? They are very slight operations, and if they do not harm, why should we not restore the cervix to its original condition? He makes one exception, the development of cancer. I would like to ask him what case of appendicitis can he say will not develop into a cancerous appendicitis, and equally so which of these cases of lacerated cervix is going to develop into a cancerous cervix? Is it only those cases having a cancerous or hereditary tendency? I take issue with the Doctor, and say that these cases should be operated on; they should be restored to their normal condition. We can not possibly do any harm in operating on these cases.

DR. EDWIN RICKETTS, Cincinnati—Dr. Deaver speaks of the vaginal route as a dismal swamp, and that vaginal puncture is not a surgical procedure. I wish to say that all he needs is more light in his "dismal swamp," and he will do better work. Take most of these post-delivery cases, in which there is an infection and accumulation of pus within the pelvis, with high temperature, rapid pulse, and you do not see that patient until rather late; I want to say that if you drain according to the older obstetricians, and give that patient relief by the vaginal route, you give her a better chance for her life than by operating by the abdominal route. There is something that the older obstetricians taught us that we are getting a little too far away from, and that is, to deal with pus as in the manner described. I say this, with all due respect to the general surgeon, who claims that he is better able to handle pus in the pelvis than the gynecologist and abdominal surgeon. I can call to mind several cases in which vaginal puncture was resorted to, a primary procedure, and those patients went on to recovery and in time bore children. Many similar cases are on record, and will help us out in this difficulty of abdominal versus vaginal incision. I recollect two cases in the earlier part of my work, when I was an enthusiast over the abdominal method, and they did not recover. Since I have adopted the plan of vaginal puncture in selected cases, I have had better results. If necessary, you can follow with the abdominal operation as a secondary procedure. This is the little light which my friend Deaver needs. He is very positive in his assertions. There is a happy medium which none knows better than the older obstetricians. If there is pus frequently it is better to let it out by the vaginal route, and do anything that may be necessary later on. Often no other procedure will be necessary.

As to drainage after abdominal section, if you open the abdomen and find the pus sac with thick walls, you can enucleate it, but if the walls are thin and fragile, it is better to puncture from below and drain rather than enucleate it through the abdominal incision. By this you prevent the extending of the infection. Extra-uterine pregnancy is always best dealt with through the abdominal incision.

DR. W. O. HENRY, Omaha—Dr. Deaver is always very positive, but I think he is too dogmatic. His statements will not always bear careful investigation. The matter of drainage is one of them. The man who opens the abdominal cavity in these acute cases will lose a large majority of them, whereas the man who first opens by the vaginal route will save nearly all of them. He says that all women who bear children have a lacerated cervix. A large proportion of them do not have a lacerated cervix. When he says that not one in fifty of those who have lacerated cervices needs to be repaired, he is greatly mistaken. It is true, some do not need it, but the large majority of them ought to be repaired. We know very well that a large majority of women with cancer of the uterus have it begin in a lacerated cervix. When it starts there, it rapidly spreads out into the broad ligaments. The latest statistics seem to show that not even 5 per cent. of them can be permanently cured, even if operated on. Women who have had a lacerated cervix are more liable to cancer than those who have not, and we owe it to our patients, our profession, and to society, to repair these cervices before cancer begins, and thus prevent its development.

DR. ANDREW SMITH, Portland, Ore.—Dr. Deaver has referred very derogatorily to the operation of curettage. Nevertheless, I consider this the most valuable conservative operation in the entire domain of gynecology. I do not think that it is ever pardonable to perforate, except rarely in post-puerperal cases, where one should not handle a curette as he would a stiletto. The uterus has been perforated frequently by abortionists, but only rarely by cautious operators accustomed to the use of the curette. Curettage accomplishes more in gynecology, I believe, than all other conservative treatments combined. I will admit that it is bad surgery to curette promiscuously and carelessly in all cases, especially of salpingitis, and that it is not always an easy matter to determine just where these contraindications exist. But if due caution is exercised, curettage is of great value in removing endometric infection, and promoting uterine drainage.

DR. D. A. K. STEELE, Chicago—I can not agree with Dr. Deaver in regard to the abandonment of the vaginal route. I quite agree with Dr. Ricketts as to the many cases in which a vaginal section will evacuate pus, and render unnecessary any further surgical operation. I have had considerable experience with both routes, and had patients die after an abdominal operation who, I believe, would have lived had I used the vaginal route. In many cases of acute infections of the Fallopian tubes, complicated with localized collections of pus in the pelvic connective tissues, adjacent to the tubes, it is the part of wisdom and sound surgical practice to evacuate the pus collection that is extratubal by a vaginal section, and later to laparotomize the patient and extirpate the tube when it can be done with comparative safety.

DR. THOMAS J. WATKINS, Chicago—Dr. Deaver has made so many sweeping statements that it is impossible to discuss all of them. The statement about the incision of pelvic abscesses ought not to go by without very severe criticism. Since 1894 I have operated on probably 200 cases of pelvic abscess by vaginal section and drainage, about 5 per cent. of which recurred. If I had operated all of these cases by

the abdominal route, the mortality would certainly have been from 10 to 25 per cent. Another thing struck me as being rather odd—namely, that he should encounter so many intestinal complications. In my experience in three hospitals, and in private practice, I almost never have an intestinal complication that requires much attention. It seems to me that in all inflammatory diseases of the uterus, ovaries, and tubes, if we are extremely careful in our manipulations, we can avoid the intestinal complications which have been mentioned. A resection of the bowel after a severe abdominal section for a suppurative disease is certainly of great importance.

DR. DEAVER (closing the discussion)—Dr. Cary said I made a mistake by saying that there are too many lacerated cervices. I repeat that if every woman who has borne children be examined carefully, with an anatomical and not an obstetrical eye, she will be found to have a torn cervix. It is not in the the condition it was before she became pregnant, although it may not have a tear or erosion.

As to Dr. Harris, the strongest argument he presented is that he is not capable of telling which of the two operations to do, and, therefore, his patients are not in safe hands. He speaks of a symptomatic cure. I do not know what that means. I know what a cure means.

DR. HARRIS—My symptomatic cure—a cure of pain and symptoms complained of.

DR. DEAVER—As to hematocele, these cases are being operated on to-day, and I have seen them recover. Several of the gentlemen have misunderstood me about lacerated cervix, curettage and dilatation. I did not say that these operations should never be done, but that they are done entirely too frequently by the occasional operator and the family doctor. I stand by that statement. I mean, furthermore, that in the presence of a lacerated cervix and tubal disease, the cervix had better be left unrepaired than repaired. You arrest the drainage from that uterus, and you convert a latent into an active salpingitis. I am sure that every surgeon of experience will agree with me in this.

Dr. Ricketts raised the question as to my experience in obstetrics. For some years I was an obstetrician, but I am one no longer. I confine myself to surgery. I see plenty of cases of puerperal infection, but I see very few cases of so-called pelvic cellulitis with abscess formation. I defy Dr. Ricketts or any other man to thoroughly evacuate pus tubes by vaginal puncture without doing more damage than good. I practice vaginal puncture; I have plenty of patients appear in the hospital with a fluctuating mass in the pelvis, elevated temperature, and without ether I take the knife and slice the roof of the vagina, evacuating a quart or more of pus. I do not call that an operation. My gynecologic friends would certainly call it an operation. I would like these gentlemen to understand that my friend, Dr. Price (who is not here to defend himself), and myself use discrimination in the selection of our cases. We do use vaginal puncture, and we operate through the vagina; therefore, I know that I have been misunderstood by many of the gentlemen present.

Dr. Ricketts refers to lighting the dismal swamp. I know of no light that will be of any aid in that operation. I do not speak of vaginal puncture, but I mean an operation in the sense that you are going to deal with these pus tubes as thoroughly and as effectively as you can from above.

Dr. Smith also attacked me on lacerated cervix. I hope he distinctly understands that I believe that a woman with a badly lacterated cervix, or a second-degree lacterated cervix, if she comes from a carcinomatous family, should certainly be operated on, but I do not believe that a mild degree of laceration of the cervix will, if operated on, prevent a carcinoma. A surgeon with twenty-five years' experience is not going to give up what he has learned from practice for what he is taught by theory. I amputate as many breasts as the majority of surgeons, and 33 per cent. come from a cancerous family. I find in my experience that in the majority of cases of carcinoma of the uterus I see—and I see a fair proportion—I have no trouble in eliciting an hereditary history, either in the mother, grandmother, or great-grandmother. I believe that a lacerated cervix of any degree should be repaired if for no other reason than to prevent the possible likelihood of a cancer. I wrote the latter part of that paper for the purpose of exciting just such a discussion as has been excited.

Dr. Smith talks about office treatment. I wish there was not a doctor in this country to-day who makes an iodin or carbolic acid or tampon treatment in his office. I have seen more disturbances of the pelvis in patients who have been subjected to such treatment. The object of my paper has served its purpose. Of course, I do not expect gynecologists to make these errors, but it is a warning that the gynecologist as well as the surgeon must give to the family physician and the occasional operator, who feels he is capable of discriminating.

Clinical Report.

CIRRHOSIS OF LIVER—REPORT OF A CASE.

C. S. MUSCROFT, M.D.; H. A. INGALLS, M.D.

CINCINNATI, OHIO.

G. H., aged 45, had been a user of wine, beer, and whisky since early manhood, but family history was good, and he never had syphilis. The patient was seen by Dr. Muscroft about April 15, and presented the typical signs of cirrhosis of the liver: jaundice, abdomen greatly distended with fluid, feet and legs edematous, pulse rapid and weak. The liver could not be outlined owing to abdominal distention. Paracentesis was advised, but rejected. The condition was not materially improved by the administration of diuretics, laxatives, regulation of diet, baths, etc. On May 1 the patient was tapped, and 370 ounces of fluid withdrawn. Percussion revealed a very small area of liver dulness. The tapping was followed by an improvement of all his symptoms; medication was continued and the edema of the feet and legs was much reduced.

The improvement was of short duration and in ten days the condition was as bad as when first seen; the toxic symptoms being more pronounced. A urinary examination was made, but no albumin or casts found. On consultation, the toxemia becoming more marked, it was decided to offer the patient the benefit of the Talma-Morison operation, and the patient was removed to the Presbyterian Hospital, where we operated on the morning of May 11. The usual technique was followed: two incisions, a large one above and a small one below the umbilicus, were made, and a drainage tube inserted into the pelvic cavity through the smaller opening. The table was then elevated to gravitate the fluid to the pelvis, so that drainage could take place while other work was being done. The liver was found to be a typical "hob-nail," thus confirming the previous diagnosis. With dry gauze sponges the visceral and parietal peritoneum were irritated and the omentum sutured to the anterior abdominal wall. Continuous drainage was decided upon, so the tube was allowed to remain in the lower opening. The wounds being closed and dressed, the peritoneal surfaces were held in contact by means of adhesive straps across the abdomen.

At the beginning of the operation the pulse was 150 and weak. At the close of the operation pulse was 116 and stronger. Dr. Allan Ramsey, who administered the chloroform, states that but a small amount was necessary. The patient rallied without nausea, and took sixteen ounces of liquid nourishment during the afternoon and night. The symptoms of toxemia became very pronounced during the night and the patient gradually sank in spite of transfusion and stimulants, and died about thirty hours after the operation.

The writer saw this operation performed under cocain anesthesia about three years ago, but the result was the same, death from toxemia. From observation of the two cases mentioned and a study of the literature, the following deductions are made: 1. The prognosis is very bad in those cases of long standing presenting toxic symptoms. 2. Results under both general and local anesthetics are about equal. Theoretically, local anesthesia should be used. 3. Shock is not noticed, these patients being in better condition after than before operation, due, no doubt, to the briefness of the operation and the inhibitory action of the bile. 4. Transfusion should be practiced at the time of operation. 5. Early operation should be advised.

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THE PATHOLOGIC EXHIBIT AT ST. PAUL.

No sooner was the Section on Pathology and Bacteriology of the Association formed than it had placed upon it the responsibility of the management of the Pathologic Exhibit. This was entrusted to a special committee, of which Dr. Frank B. Wynn was made Chairman, and in order to defray certain necessary expenses the sum of $500 was set aside for the use of this committee. Hence, the Exhibit at St. Paul was the first official attempt of this kind. Surely no one who visited and inspected the large, conveniently displayed collection of varied and interesting nature, in the Ryan Annex, but will agree that the committee had done its work very successfully and that the money expended was put to good use.

The Exhibit was interesting from various view-points. Perhaps the beautiful preservation of natural colors seen in many of the specimens preserved for museum purposes by Kaiserling's method, or some modification thereof, would attract the special attention of the more hurried and superficial inspector. But even the expert pathological anatomist could not but admire the perfect result demonstrated by some of the exhibitors. And the general practitioner had here a splendid opportunity to see the gross lesions of many of the diseases, rare and otherwise, which he sees more or less frequently clinically. The instructiveness and suggestiveness of the pathological specimens were surely of much value to many. A series of bacterial cultures, mounted in a novel manner, attracted considerable notice because of their value for demonstration and instruction.

In the second place there was a large number of exhibits illustrative of original work in anatomy, normal and pathologic, and in bacteriology, consisting of gross and microscopic specimens and photographs. Perhaps the exhibits of this character were not so immediately attractive as the more showy and more purely museum preparations already referred to; but the significance and value of the specimens illustrative of scientific work grew apace on closer study. The specimens constituted the public documentation of work already published or in the course of publication; many were accompanied with full written or printed explanations and drawings. Among the more striking exhibits of this character mention may be made of a series of successful transplantations of sarcoma in white rats, showing the growths in various parts of the animal, and the collection of photographs illustrative of the various aspects of blastomycetic dermatitis, clinical, histologic, and mycologic. Some of the papers read before the Pathologic Section were illustrated by means of demonstrations of specimens of this kind.

In the third place, a beginning was made in illustrating methods of teaching by the exhibition of a number of student note-books and drawings from laboratory courses—an excellent idea that ought to lead to larger exhibits of this or allied nature in the future. There were also a number of miscellaneous exhibits of historic and other interest. It is quite evident that the term "Pathologic Exhibit" hardly expresses the scope and varied nature of the material brought together. Scientific Exhibit would be better. As expected, the institutions in the region naturally tributary to the meeting place furnished the larger bulk of the exhibit. Some specimens were brought from considerable distances, however.

As to suggestions for the future, the most important because of such general character, would be that efforts should be continued to extend the scientific tendencies noted in the St. Paul Exhibit. Material illustrating original work, demonstrations of special technical methods, of methods and results of teaching and practical demonstrations of various kinds should be secured. Anatomical specimens of all kinds, always welcome, may well begin to share the attention with exhibits of a physiological and chemical character. Probably the fusion of the Section on Physiology and Dietetics with that of Pathology and Bacteriology will lead to a better representation of scientific physiology, not only in the exhibit, but also in the Association at large. The St. Paul Exhibit was gratifying also because of the absence of all commercial taint on the part of the exhibitors and because there was no evidence of the presence of morbid curiosity seekers.

MEDICAL ORGANIZATION.

It seems from an editorial in the *Lancet*,[1] that the members of the medical profession of Great Britain, in their attempt at organization, have the same arguments to meet that we have in this country. One of these, and the most often used, sometimes by physicians themselves, is that we are forming trade-unions. The *Lancet* very correctly states that while we do not decry trade-unions, there is a decided difference between such and the organization of medical men which is being so slowly accomplished. There is no denying that trade-unions have sometimes been animated by nobler sentiments than the desire to extract from the employer of labor the maximum of pay for a minimum of work. If the tyranny of capital has been replaced by the tyranny of labor, the situation is one that usually adjusts itself. But admitting this, professional union means something more than this; we can not rid our-

1. June 15.

selves of our higher ideals, and the very existence of a system of medical ethics as a living force in the profession gives the lie to those who would compare medical organization to trade unionism. The fact that this is done by English politicians and lawyers like Chamberlain and Grimthorpe, shows either their utter lack of principle or how superficially they have regarded the subject.

The ideal organization of the profession is along ethical lines and no other is intended. It is daily becoming more plain that it is only by some combination and organized effort that the true ethical spirit of the profession can be preserved and that violation and perversion of its mission by individuals and cliques can be avoided. Especially is it needed to prevent our exploitation by other organizations whose methods and aims are the reverse of ethical in any sense of the word. We can not keep up our elevated standards by subordinating ourselves and them to outside selfish interests. The need of some movement in this direction is not less in this country than in Great Britain, though each country may have its special problems to meet.

That our British confrères are awake to the situation is shown by the editorial referred to, and also by other evidences. One of these is given in a letter published in the *British Medical Journal* of the same date, referring to the reorganization of the British Medical Association:

"Five pounds a year and consent to the discipline of combination would not be too much to give, if through the British Medical Association the medical profession could become organized, self-protecting, and consequently self-respecting and respectable. In these days of organization in all callings, the only one not doing so will naturally go to the wall, and its position become intolerable. One thing is certain, that conservatives, liberals, radicals, anti-Boers, pro-Boers, millionaires, and workingmen, Chamberlains and Steads, are all quite agreed on one point, namely, to exploit the medical profession to the utmost of their power, and on submission, laugh in their sleeves when referring to 'the noble profession,' 'the patriotism of the profession,' a profession which for the most part receives a beggarly pittance, considering the time, energy, and money spent in obtaining a degree or diploma; not to say that it is without honor in our own country, which has been practically shown twice over lately, when ministers of the government have held us up to derision in the House of Commons. The position, bad as it is, will get worse so long as we remain 'an unorganized mob.' We must follow the general example; combine professionally, and take a more active share in politics."

If the American profession, as well as that in Great Britain, is to become duly respected it must protect itself; it must become "organized, self-protecting, and consequently self-respecting and respectable."

TREATMENT OF GONORRHEA WITH NITRIC ACID.

In the presence of disease the object of treatment is the repression of the morbid process and the prevention of complications and sequelæ. There are few specifics, the indications for therapeutic measures being in most instances either physiologic or empiric. Notwithstanding the many remedies recommended at different times in the treatment of gonorrhea, silver nitrate still remains one of the best, if not the best, for this purpose. Its use, however, is attended with the disadvantage of being followed by unpleasant burning of such a degree that many patients are fearful of its employment. Inasmuch as argentic albuminate and proteid combinations of nitric acid result from the application, Popper[1] was led to make urethral injections of a solution of nitric acid in order to avoid the generation of heat caused by the chemic decomposition of silver nitrate. Cocain or eucain may be added to the solution for anesthetic purposes. In cases of acute gonorrheal urethritis a 10 or 15 per cent. solution of pure concentrated nitric acid was injected from three to five times daily, the fluid being permitted to remain in the urethra for one or two minutes. In the course of from twenty-four to forty-eight hours the character of the copious discharge will have changed. The urine becomes clear and contains only fibers. The secretion is viscid and considerably diminished. In the course of five or six days at times only a small drop can be expressed; later only in the morning. In the course of a week in most instances the discharge is even still less. The gonococci also rapidly diminish in number in the course of a day and disappear wholly in from five to eight days. The mucous discharge contains many epithelial cells, which are in part filled with gonococci. For three or four days after the gonococci have no longer been demonstrable the injections are made but twice a day and then but once a day. After from twelve to fourteen days astringents are prescribed for the purpose of causing the disappearance of any filaments that may yet be present. If the discharge is not increased following a seminal emission, or gonococci do not appear, the injections are gradually discontinued, so that the treatment shall be concluded in from fifteen to thirty days. In chronic cases or in the presence of posterior urethritis, a 25 per cent. solution of nitric acid is injected once daily by means of Guyon's syringe. At times the strength of the solution is increased and the injections are made less frequently.

The opinion is expressed that the good effects resulting from the employment of silver nitrate and copper sulphate in the treatment of gonorrheal urethritis are attributable to their coagulating action, while the newer combinations of casein, albumin and peptone with silver, which are precipitated when injected into the urethra, exert only a mechanical influence like pure water, solutions of boric acid and physiologic salt solution. It is believed further that nitric acid is not the only agent

1. Centralbl. für die Krankheiten der Harn- und Sexual-Organe, B. xii, H. 4, p. 184.

capable of yielding the admirable results described, but that other coagulating substances, such as chromic acid and picric acid, have a like action, the acid reaction of the solution also possibly contributing to the bactericidal effect.

In explanation of the results obtained it is suggested that the epithelial cells injured by the toxins generated are attacked by the nitric acid and their desquamation thereby favored. The method described has been on trial for two years, and experience has shown it to be more rapid and milder in action than the use of silver nitrate. If in the course of treatment the discharge does not become thin and serous, if the mucous membrane becomes sensitive and erections painful, the treatment is continued by means of astringents. Often the urine becomes entirely clear. Sometimes, however, filaments that contain no gonococci persist for several weeks or months.

TUBERCULIN.

The furor excited among physicians and laity, in 1890, by the announcement that Koch, the discoverer of the tubercle bacillus, had also discovered in tuberculin a cure for tuberculosis, will not soon be forgotten. The disappointment, not to say disgust, that followed when Virchow and others proclaimed the dangers attending the use of the new remedy, will likewise long be remembered. Physicians and laity feared to employ the remedy and it was generally discarded. A very few used it cautiously for purposes of diagnosis. A still smaller number, including several Americans, employed it as a curative agent. Among these was Goetsch, of Slawentzitz, who now, at the end of ten years, and at the solicitation of Koch, publishes his statistics.[1] He tells us in plain and simple language, having the ring of honesty and the marks of scientific accuracy, that from 1890 to 1900 he has treated 175 cases of tuberculosis with Koch's tuberculin with a percentage of cure of 71, that is, 125 have been cured and 50 improved. The record is startling, even when we consider that his cases are carefully selected ones, where the process is not far advanced, and where mixed infection has presumably not occurred.

Goetsch makes his diagnoses by the history and physical signs, but has called no case tuberculous unless tubercle bacilli have been found, or unless there is an unmistakable reaction to tuberculin; and he calls no case cured unless bacilli disappear and the patient tolerates without reaction a large dose, even up to one gram, of the old tuberculin.

He lays down three rules that should be followed: 1. The treatment should only be begun when the patient is free from fever. 2. The dose should not be increased until the last dose is tolerated without reaction. 3. The patient, on the day of the injection, as well as on the day following, must remain in bed.

His illustrative cases seem convincing, and those who have all along hoped that in tuberculin there was an agent that, rightly employed, might rank with quinin and diphtheria antitoxin as a specific, will again take courage from this contribution to the subject, and will await eagerly for confirmation from other quarters of the remarkable results reported by Goetsch. For, as said before, even granting that he selects only the favorable cases, the incipient ones, the results seem marvelous and, if supported by other investigators, will go far toward restoring to favor the despised tuberculin.

1. Deut. Med. Wochenschrift, June 20, 1901.

MEDICAL EDUCATION AND ITS RECOGNITION BY THE RICH.

It is satisfactory to see things coming our way at last. The recent donation of a million dollars to Harvard University, the Carnegie fund for the Scottish schools, the Rockefeller fund for medical research, and still other donations and endowments for medical instruction, indicate that the branch of scientific education which pertains to prevention and cure of disease is at last being considered. It is to be hoped that this is only the beginning of better things and that the endowment of medical research and medical education will soon be the rule and not the very rare exception, as has been the case heretofore.

THE ILLINOIS MEDICAL PRACTICE ACT.

The Illinois Supreme Court, by what seems a rather technical decision, has interpreted the Illinois medical practice act in such a way that it is impossible to discipline for unprofessional conduct any one whose certificate antedates the passage of the present law in 1899. It was certainly not the intention of those who framed the law to have this interpretation put upon it, but in the redundancy of their legal phraseology they make it open to this construction, which the court adopts. The result is that any one licensed before July 1, 1899, is free to practice any kind of quackery without any recourse on the part of the state. Only licensees under the law now in force can be disciplined. The court, according to the press reports of the decision, makes the suggestion that the defect in the law can be corrected by legislation, which it is hoped is the case. It is also to be hoped that the amendment can be so drawn up as to carry out the intentions of the makers beyond all possibility of any annulment by court decision.

AN EXAMPLE OF THE EDDY LITERATURE.

As an example of how words can be thrown together in such a manner as to sound sweet and beautiful, and at the same time mean nothing, Mrs. Eddy's "Key to the Scriptures" is a magnificent example. What is needed by the ordinary mortal is a key to the "Key," to unlock the mysterious secrets covered up by the verbiage in that money-making and awe-inspiring book. On a small scale, however, Mrs. Eddy's recently delivered speech, which we have no doubt is appreciated and understood by her followers, is another charming illustration of what she can do with words when she tries. The newspapers announce that at the recent gathering of her pilgrims Mrs. Eddy appeared on the balcony

and said: "Beloved brethren"—nearly all present were women—"My joy in meeting with you, is my present text. When we shall meet again, will be my next. I think you will agree with me that you have heard sufficiently from me in my message. I will only look upon your faces and then return again to my studio." We would advise those interested to take this "speech" to some shady, secluded spot, beside a cool and babbling brook and study and ponder over it. Its secret meaning shall be revealed. There is a hidden meaning, although the non-adepts may not be able to discover it, especially just what is hidden in the first two sentences.

SYPHILITIC FEVER.

The fact that physicians do not seem to be sufficiently alive to the general fact that syphilis may be the cause of obscure forms of fever, which yield only to proper antisyphilitic treatment, leads Futcher[1] to report three interesting cases of this kind. The most obscure cases of this category are those in which there are no evident outward manifestations of syphilis. Futcher points out that fever in syphilis sometimes, though rarely, occurs so long as three or four weeks before the appearance of the eruption; it may occur just previously to or coincident with the secondary eruption, constituting then the so-called "fever of invasion"; and the fever may come on at any time during the secondary or tertiary stages. In one of Futcher's cases it appeared twenty-nine years after the initial lesion. Syphilitic fever may be continuous and mild, of a remittent type, and of a definite intermittent type, being often mistaken for malaria, typhoid, sepsis, etc. Janeway has cited a number of cases of syphilitic fever which had been diagnosed and treated as tuberculosis, some of the patients having been sent to sanatoria for the tuberculous, and yet the fever and other symptoms promptly disappeared with specific treatment. Enough has been said to emphasize that all cases of fever of obscure origin should be studied with syphilis in view. Evidences of tertiary lues should be sought for in such obscure fevers the exact cause of which is absolutely unknown.

A DECAYING RACE.

According to the Honolulu *Commercial Advertiser*, the Hawaiian race is progressing rapidly toward extinction. This is not strictly news, for it has been long well known to be the fact, but it appears that there has been a decided acceleration of the process within the past two or three years, and matters are more likely to be worse than better. The causes hitherto effective, the neglect of infants by native mothers, the gradual diminution of the *poi* and fish supply, and the spread of loathsome disease, have been reinforced by the newly-acquired vice of opium-smoking. The increasing cheapness of the drug has placed it within the reach of even the poorer Hawaiians and they have the natural disposition to indulge in it. They lack, however, the racial vitality and self-control of the Asiatic consumers, and the results are, therefore, the more disastrous. Their natural improvidence and carelessness of the future is also against them; they see the precipice ahead, but the desire for the present indulgence is imperative and they do not care. The paper quoted says that there are probably now living men of voting age who will see the last full-blooded Hawaiian native, "but that long before that the race will have become a negligible quantity." There is something tragic in the utter annihilation of a race, especially one so amiable in many respects as are the Hawaiians, and it is to be hoped that something may be done even yet to check the tendencies that are causing their decay.

1 New York Medical Journal, June 22, 1901, The Journal A. M. A., page 63.

THE UNSENTIMENTAL NURSE.

The trained nurse is a much belauded personage, especially in her graduation addresses, but she also comes in for her share of criticism. Dr. Malcolm Morris and others find her often conceited and too unconscious of the due subordination she owes to the medical profession, of which she is a sort of useful parasite. Others have criticised also, but in a recent issue of a lay journal we find even her merits, from a physician's point of view, are taken exception to by those who endure her ministrations. It objects to her noiseless efficiency, her conscientious regularity, her simulated amiability, her mechanical perfection in the performance of duties; her emotional impassibility, it says, spoils all the pleasures of illness; the patient can make no appeal to her sympathy and she only aggravates his irritability. What the average inexperienced male "who wants to enjoy the pleasures of illness," desires, the newspaper says, "is a ministering angel with actual human sympathies, whose feelings will be touched by human suffering, whose gentle hand will smooth the pillow and cool the fevered brow, and all that sort of sentimental thing," not a self-contained and unimpressionable female, as methodic as a machine and "as dead to his personality as a wooden Indian." Personally, we do not know what the pleasure of illness is, something, we suppose, like the dying of a rose in aromatic pain, etc., but we can appreciate the nurse's position when in unavoidable attendance upon a patient of that type, so far as our fancy can reproduce him. It may be that some nurses are wooden in their ways and obtrusive in their lack of sympathy. If so, it is an error, but one that is on the whole less likely to do mischief than the opposite extreme. To be a philanthropist, as Dr. Sevier says, one must be cold-hearted, and most certainly an inflammable-hearted female philanthropist in a hospital, or even in a sick room, is a dangerous thing. When a nurse can, with all her other requirements met, steer clear of the Scylla of emotionalism on the one hand and the Charybdis of indifference on the other, she is a wonderful creature, common as she may be, and then if she is still criticised one ought to love her for the enemies she has made.

LANDRY'S PARALYSIS OF DESCENDING TYPE.

Although the nature of so-called acute ascending paralysis is not definitely known, there is ground for believing that the condition is dependent on some morbid process, probably infectious-toxic, expending its influence upon the lower motor neuron, that is, upon the gang-

lion-cells of the anterior horn of the spinal cord or the peripheral motor nerves or both. That no lesions are demonstrable would seem to indicate that the action is essentially a toxic one short of inflammation or degeneration. As a rule the symptoms of the disorder are of ascending character, paralysis appearing first in the lower extremities, then in the trunk and finally in the upper extremities. So common is this mode of invasion that it has come to be considered distinctive. That this is not so would seem to be shown by a case reported by Leonard A. Rowden.[1] The patient was 10 years old, and fell a distance of ten feet into an excavation, without apparent bad results. On the following day he did not feel well and held his head as if he had a slightly stiff neck, and he vomited once after taking some light food. During the night he was rather restless, and on the following day he complained of slight headache and pain in the neck. The succeeding night he was again restless and there appeared to be slight fever. A day later the temperature was found to be almost 103, the pulse 100 and good and respiration normal. The head could not be voluntarily turned to either side, but there was no difficulty in passive movement. There was also inability to raise either arm at the shoulder-joint. The grasp of each hand was fair, the forearms could be readily flexed and extended at the elbow-joint and the legs could be kicked about briskly. On the next day there was complete paralysis of the muscles of both upper extremities and of the trunk and also of the intercostal muscles, with total paralysis of the lower extremities. There was no headache, no rigidity, nor twitching of the muscles, no loss of sensibility, and the mental powers were preserved, as was also control of the sphincters. In the further progress of the case the paralysis of the legs became more advanced and the muscles of deglutition seemed somewhat involved. The knee-jerks were lost, and the facial muscles were later involved and speech became indistinct. The pulse grew rapid and weak, the heart failed, cyanosis developed and death ensued after an interval of five days. Unfortunately, an autopsy could not be secured, but the symptoms and the course are sufficiently distinctive to justify a diagnosis of Landry's paralysis of descending type.

MISUSE OF THE NATION'S NAME.

The New York State authorities have issued a certificate of incorporation to a concern styling itself "The United States Board of Health," whose business is announced to be the issue of certificates setting forth the purity or harmlessness of food products and patent medicines. Its name is claimed to have been copyrighted by the trick of printing a report bearing same. The official who issued the copyright is said to have "raised a question," as well he might, as to the name; but he issued it nevertheless. Of course the undisguised intention is to sell, to all those who will pay for them, certificates which to all appearance come from a government board of health, guaranteeing their products as having been analyzed and found fit for food by United States officials. The authorization of such a corporation, under such a name, is an outrage upon the people of the entire nation, compared with which the "use of the flag for advertising purposes" sinks to nothingness. There was a time when the coupling of the name of the United States, or some particular state or city, with a private enterprise was regarded as simply a token of patriotism or of state or local pride. "United States" or "New York" or "Minnesota" banks, insurance companies or hotels, were, in this view, quite unobjectionable. But latterly a class of unscrupulous adventurers in various lines of business have taken to using such names for purposes of deception and fraud; and they find numerous victims among the less informed members of the community. Evidently the time has come when some department of the Government should be clothed by Congress with the power to prohibit the use of the name "United States" for any purpose of fraud or deception.

The above is from the St. Paul *Pioneer-Press* of June 18. With the facts as above given the matter is one that interests the medical profession and might well be considered by the Committee on National Legislation of the AMERICAN MEDICAL ASSOCIATION. If Armstrong or Buchanan should ask for a certificate of incorporation for the United States Government Medical College, they could probably obtain it under the laws of some of the states. For our credit abroad, as well as for our welfare at home, we should most decidedly abridge this liberty.

1. British Med. Jour., May 4, 1901, p. 1076.

Medical News.

ILLINOIS.

St. Francis Hospital, Evanston, was formally opened, June 29. The hospital has accommodation for 20 patients.

Dr. Arvid E. Kohler, Moline, has been elected physician for the poor of that city.

Sterling physicians recently held a meeting at the office of Dr. Frank Anthony and adjusted and revised the fee-table.

Drs. Louis H. Clampit and William C. Cole, Jacksonville, have been appointed to the medical staff of the Illinois Central Hospital for the Insane at that place.

New Hospital at Quincy.—The trustees of the Illinois Soldiers' and Sailors' Home at Quincy have approved plans for a new hospital for the institution. An appropriation of $24,000 was made by the state legislature for this purpose. The hospital will accommodate 90 patients.

Chicago.

Jenner Medical College held its commencement exercises, June 20.

Dr. and Mrs. James M. Fraser sailed for Liverpool, June 11, on the *Servia*.

Dr. John A. Robison has resigned as professor of medicine in Rush Medical College.

Dr. C. Pruyn Stringfield has been appointed a colonel on the staff of Governor Yates.

Dr. E. J. Senn has been appointed assistant professor of surgery in Rush Medical College.

Dr. Ernest A. Matthaei and Dr. Paul R. Welcker and wife sailed June 8 on the *Patricia* for Hamburg.

Prof. Nicholas Senn was given the degree of Master of Surgery by the University of Chicago, June 21.

Prof. L. Hektoen left last week for a three months' holiday in Sweden. He will devote all his time to recreation and pleasure.

Dr. John M. Dodson was elected president of the Alumni Association of the University of Wisconsin, at the annual meeting, June 19.

Dowieites Appeal Denied.—Judge Clifford has dismissed the appeal of Henrika Bratsch, a deaconess in the Zion church, who was fined $100 by Justice Everett for practicing medicine without a license.

Globe-Circlers.—Drs. Nicholas Senn, Jacob Frank and Daniel R. Brower and W. M. Maston, of Mobile, Ala., have sailed for Europe. They are to make an eastward trip around the world via Berlin, Moscow, Siberia, Vladivostock, Corea, Japan and Vancouver, reaching Chicago about October 1.

St. Mary's Hospital.—The cornerstone of the Hospital of St. Mary's, which is to occupy an entire block, bounded by Haddon and North Hoyne avenues and North Leavitt and

Thomas streets, was laid with appropriate ceremonies, June 16. The foundations have been laid and the building will cost about $200,000.

Wesley Hospital, at Dearborn and Twenty-fifth streets, was informally opened, June 17. The formal dedication is deferred until $25,000, the balance of the $250,000 required for the purchase of land and the erection of the building, has been raised. The building is six stories in height and contains 250 rooms.

St. Francis Hospital, Evanston, has been established by the Sisters of St. Francis in the Kirk mansion on Ridge avenue. Its staff is as follows: Dr. John B. Murphy, consulting surgeon; Drs. William A. Kimmit and William Hessert, surgeons; Drs. Edward H. Webster, William A. Phillips, William B. Parkes, Evanston, and George Sintzel, Niles Center, physicians; and Dr. Shobal V. Clevenger, nervous and mental diseases.

Fire at the College of Physicians and Surgeons.—A fire, started by lightning, damaged the College of Physicians and Surgeons to the extent of at least $40,000, June 25. As the West Side Hospital, which adjoins the college building, appeared to be in danger, the 69 patients were removed to the County and Presbyterian hospitals, where they were cared for. The removal was accomplished without any casualty, thanks to the discipline and coolness of the nurses of the hospital. The two upper floors of the college building sustained the most damage. The library, many microscopes and the fine pathological exhibit made by Dr. W. T. Eckley at the meeting of the ASSOCIATION in St. Paul, were destroyed beyond repair. The building was fully insured. It will be repaired and equipped for the use of the dental department of the University of Illinois; the medical school will remove to the recently acquired West Division High School property, which is now being remodeled for that purpose.

KANSAS.

Dr. **Henry O'Donnell,** Ellsworth, has been appointed surgeon-general of the Kansas National Guard.

A hospital for colored people will soon be erected in Leavenworth. Much of the money needed has been subscribed.

The State Board of Medical Registration and Examination completed its organization, May 21, and elected Dr. George F. Johnson, Lakin, president, and Dr. W. H. Roby, Topeka, secretary.

Registration.—Under the new law, Kansas physicians will have till September 1 to file with the secretary of the examining board their authority to practice. If the authority is sufficient, the board will issue certificates. After September it will be an offense to practice medicine without a certificate from the state board. The penalty is a fine of from $1 to $200. The examination fee is fixed at $15. The fee for certificates to physicians who do not take the examination is $2.

KENTUCKY.

A new hospital is to be erected in Louisville at a cost of $50,000 by the Franciscan Sisters.

Quarantine Against Carlisle.—The health officers of Bath County on May 30 proclaimed the establishment of an absolute quarantine against Carlisle on account of the prevalence of smallpox in that town.

Smallpox at Cynthiana.—Dr. N. W. Moore, health officer of Cynthiana, has sent the following report of the smallpox condition at Cynthiana, on May 21. Since April 6 there have been 54 cases and no deaths. Two large pest-houses—one for whites and one for colored, have been erected and contained 6 cases at the time of the report. There were then only 4 cases in the immediate town, and several cases were distributed through the county.

LOUISIANA.

Dr. **Guy A. Darcantel,** New Orleans, has been appointed by the State Board of Health, resident physician at Rio Cocle, Colombia, Central America.

Dr. **A. B. Brown,** New Orleans, has been appointed one of the physicians of the United Fruit Company and has been assigned to the steamer *Jamaica.*

Dr. **Arthur Weber,** newly appointed member of the New Orleans Board of Health, has had his claim to membership confirmed by Judge John St. Paul, who has issued a peremptory mandamus compelling the board to accept Dr. Weber.

New Quarantine Station.—The proposed establishment of a quarantine station by the State Board of Health at Lake Borgne Canal as soon as it is opened to traffic, is meeting with general approval. There will be need of a health station at that point on account of its direct communication with Mississippi sound.

MARYLAND.

New Course at Johns Hopkins.—During October a limited number of physicians will be admitted to a special class for the study of the important tropical diseases met with in this region, especial attention being given to malaria, dysentery and typhoid fever. Preference will be given to officers of the medical departments of the army and navy.

The Maryland Medical Journal Company, at its annual meeting in Baltimore, June 13, elected Dr. Robert T. Wilson, vice-president, Dr. Horace M. Simmons, secretary and general manager; Drs. William Osler, William H. Welch, John D. Blake, Wilmer Brinton, Hiram Woods, Jr., and Julius H. Wyman, directors; Dr. John S. Fulton, editor, and Dr. Thomas R. Brown, associate editor.

Preventive Treatment of Rabies.—The Department for the Preventive Treatment of Rabies (Pasteur method) at the City Hospital, Baltimore, has published a detailed report of the 209 cases treated. But one death is reported, and this is considered to have been due to delay in resorting to treatment. Of the 209 patients 15 were bitten on the face and neck by animals proven by inoculation to be rabid. Some of these bites were very severe, but none resulted fatally.

Baltimore.

Kerosene for Mosquitoes.—Health Commissioner Bosley has issued a proclamation to the people, asking their co-operation in the extermination of the mosquito. He advises every householder to pour one gill of kerosene oil into all wells and a proportionate quantity into all pools and drains where stagnant water may collect at least once every two weeks.

MICHIGAN.

Dr. **Herbert M. King,** Grand Rapids, sailed for England, July 2.

Dr. **Conrad Georg, Jr.,** has been appointed city physician of Ann Arbor.

The Medical Department of the University of Michigan graduated a class of 75, on June 20.

Mr. Frederick Stearns, of Detroit, eminent as a conchologist and pharmacist, and formerly president of the American Pharmaceutical Association, has been given the degree of Master of Arts by the University of Michigan.

MINNESOTA.

The State Board of Medical Examiners issued license to practice to 33 applicants, June 15.

A hospital in connection with the State School for the Feeble-Minded at Faribault is to be constructed, to cost about $11,000.

Hamline University Medical Department held its annual commencement exercises at Minneapolis, June 3, graduating a class of twenty-four. Rev. Marion D. Shutter delivered the address to the class on "Progress and Problems of Medicine."

MISSOURI.

Dr. **Frank J. Lutz,** St. Louis, has been appointed surgeon-general of Missouri, with the rank of brigadier general.

Dr. **William H. Heidorn,** Bridgeton, has been appointed a member of the pension examining board vice Dr. Samuel J. Will, Mehlville, resigned.

A hospital is to be built on the grounds of the Confederate Home of Missouri, Higginsville, for the use of inmates of that institution. The legislature has appropriated $15,000 for this purpose, $12,000 of which is to be devoted to the expense of construction and the balance to equipping the hospital.

NEW YORK.

Dr. **William Carr,** New York City, will sail for Europe July 6.

Dr. **F. J. Wagner** has been appointed house physician at Riverside Hospital, Buffalo.

New Laboratory.—A new laboratory will be built for and adjoining the New York Medical College and Hospital for Women.

Dr. **Frank L. Christian,** New York City, has been appointed medical superintendent of the Elmira Reformatory. The salary is $3500 with a residence.

Dr. **D. Bryson Delavan** has been appointed consulting surgeon, department of laryngology, St. Luke's Hospital, in place of Dr. George M. Lefferts, resigned.

Dr. Paul F. Munde, New York City, who has been for many years professor of gynecology at Dartmouth Medical College, has resigned and has been elected professor emeritus of gynecology.

Smallpox on the Increase.—According to the report of the New York City Board of Health smallpox is on the increase in that city. Twenty-two new cases and one death were reported June 12.

Dr. Theodore Walser, New Brighton, who has rendered such efficient service to Staten Island in the prevention and limitation of epidemic disease, has been appointed sanitary superintendent of the Borough of Richmond.

The Lewis Memorial Cottage Hospital, at New Dorp, Borough of Richmond, given to St. John's Guild, was recently dedicated. The building is of wood, 103 feet long and 34 feet, 10 inches wide. It is intended for the reception of infants that are seriously ill, and the two wards will each accommodate eight infants. The cost of building and equipping the hospital was $10,000.

OHIO.

Dr. Alexander Erwin, Mansfield, has returned from a six months' tour of Egypt and Europe.

A so-called magnetic healer was arrested for illegal practice at Rockford, Mercer County, June 19, and was held to the grand jury in the sum of $500. A man charged with practicing medicine illegally was arrested at Findlay, June 15.

The State Board of Medical Registration and Examination examined thirty-nine candidates for license at Columbus, the regular examination on June 11, 12 and 13. The result of the examination will be made known after the regular meeting of the board in July.

College Changes.—Dr. J. C. Oliver has been made dean of Miami College in place of Dr. N. P. Dandridge, resigned, and Dr. Frank W. Langdon has been elected professor of neurology. Dr. D. I. Wolfstein has been made professor of neurology and Dr. Mark A. Brown, professor of clinical medicine in Cincinnati Medical College. Dr. H. J. Whitacre has been made professor of pathology; Dr. William Muhlberg, professor of physiology and Dr. Fred Forchheimer, professor of practice of medicine, taking the chair of the late Dr. J. T. Whittaker, in Ohio Medical College.

Memorial Volume on the Late Dr. James T. Whittaker.—At the meeting of the Academy of Medicine on June 25, 1900, resolutions of regret at the death of Dr. James T. Whittaker were adopted and ordered printed, together with a memorial volume setting forth the principal events in the life of the distinguished physician. This volume has just been distributed among the members of the Academy. It contains a biographical sketch by Dr. A. G. Drury, editor; also reminescent sketches by Drs. P. S. Connor, Thad A. Reamy, J. L. Cleveland, Joseph Ransohoff, C. D. Palmer, S. C. Ayres, A. Ravogli, S. P. Kramer, John Withrow, C. P. Judkins, T. C. Minor, J. C. McMechan, Kochler, Howard A. Kelly, of Baltimore, and others.

SOUTH CAROLINA.

The Medical College of the State of South Carolina, Charleston, held its seventy-second annual commencement exercises, April 2. A class of thirty-two was graduated, the address to the class being made by Major J. C. Hemphill.

Discrimination in favor of the graduates of the Charleston Medical College, as shown in the bill recently passed by the legislature, which exempts from examination graduates of that college, is strongly condemned by the representative profession of the state, which has been successful in checking the ratification of the bill.

The State Board of Medical Examiners, at its May session, examined 46 applicants, 11 of whom failed to pass. The board unanimously adopted the following resolution: "As the law relating to the practice of medicine in South Carolina is being frequently violated, therefore, be it resolved, that we appeal to the legally licensed physicians of the state and to its intelligent citizens to report all said violations to the board."

TENNESSEE.

Dr. Richard Douglas, Nashville, has resigned from the faculty of Vanderbilt University Medical Department.

Dr. James A. Delaney, Bristol, has been appointed division surgeon on the staff of the commander of the Tennessee Division, Sons of Confederate Veterans.

Memphis Hospital Medical College held its commencement exercises April 26, graduating a class of 190. Prof. J. L. Minor delivered the doctorate address.

Grant University Medical College.—The contract for the construction of the new medical college was let June 12, for $22,622.05. The building is to be completed, April 1, 1902.

The legislature has passed the bill creating a State Board of Medical Examiners and requiring the registration of all physicians. The osteopaths and "Christian Scientists" are exempted from the provisions of the act supposedly because they are not physicians.

TEXAS.

Dallas Medical College, which was recently made the medical department of Trinity University, graduated a class of eight at its exercises, June 18.

The Medical Department of the University of Texas held its eleventh annual commencement exercises at Galveston, June 15, graduating a class of six.

The State Medical Association of Texas has been incorporated with principal office at Austin, and without capital stock, by Drs. Berthold E. Hadra, Taylor Hudson, Robert F. Miller, Henry P. Cooke and Hamilton A. West.

Quarantine in Grayson County.—Acting on authority of the commissioners' court and with the approval of State Health Officer Blunt, County Physician Thomas S. Freeman, of Sherman, declared a quarantine against all houses in which there is smallpox.

WEST VIRGINIA.

Drs. James F. Means and C. Edgar Kahle, Sistersville, have sailed for Germany, where they expect to remain for several months.

Dr. Augustus J. Lyons, Parkersburg, has been elected superintendent of the Second Hospital for the Insane, Spencer, vice Dr. L. V. Guthrie, resigned.

State Board of Health.—Governor White has recently appointed the following gentlemen on the State Board of Health: Drs. D. H. Taylor, Wheeling; D. P. Morgan, Clarksburg; T. F. Lanham, Grafton; S. N. Myers, Martinsburg; J. E. Robins, Claremont; A. G. Staunton, Charleston; A. N. Frame, Parkersburg; W. Varner, Glenville, and A. R. Barbee, Point Pleasant. At the annual session held in Charleston, June 11, Dr. S. A. Myers, Martinsburg, was elected president, and A. R. Barbee, Point Pleasant, secretary. Fifty-four applicants presented themselves for examination. The next session will be held in Huntington, November 11.

GENERAL.

Dr. S. Weir Mitchell, with his wife and daughter, reached San Francisco June 24, after a trip round the world. He has been greatly benefited by the rest and change.

Cuba Has No Yellow Fever.—Yellow fever has been combated with such vigor that not a single death has been reported this year. There has not been a fresh case in Havana for nearly two months; neither are there any cases in other parts of the island.

A Foreign Tribute to the Late Dr. Mergler.—The *Gazette Méd. de Paris* publishes an extended obituary notice of the late Dr. Marie J. Mergler, of Chicago, emphasizing her success in abdominal surgery, and stating that Europe has not yet produced a woman operator of that stamp.

Gift to Harvard.—J. Pierpont Morgan has promised to build three of the five buildings desired by Harvard Medical School. This will involve the expenditure of a million dollars, and the buildings are to be devoted to applied biological research. They are erected as a memorial to the late Julius Spencer Morgan, a native of Massachusetts, and a banker of London, the father of the donor.

Prize Essays on Subjects Connected with Tropical Diseases.—1. A prize of the value of £10 entitled the Sivewright Prize, presented by the Hon. Sir James Sivewright, will be given for the best article on "The Duration of the Latency of Malaria After Primary Infection, as Proved by Tertian or Quartan Periodicity or Demonstration of the Parasite in the Blood." 2. A prize of the value of £10 entitled the Belilios Prize, presented by the Hon. E. R. Belilios, will be given for the best article on "The Spread of Plague from Rat to Rat, and from Rat to Man by the Rat-flea." 3. A prize of the value of £10 entitled the Lady Macgregor Prize, presented by Lady Macgregor, will be given for the best article on "The Best Method of the Administration of Quinin as a Preventive of Malarial Fever." The papers are to be sent to the editors of *The Journal of Tropical Medicine,* 83-89, Great Titchfield Street, London, W., by Dec. 1, 1901. All papers sent

in become the property of the *Journal*, and will be published as the editors decide. The competition is open to qualified medical practitioners of all denominations and every nationality. The papers may be written in English, French, German, Italian or Spanish. The names of the prize winners will be announced in January, 1902. The judges are Surgeon-General Roe Hooper, Professor Kenneth MacLeod, and Dr. Patrick Manson.

CANADA.

Outbreak of Smallpox.—Between twenty and thirty cases of smallpox have just been discovered in a small village near Brantford, Ontario. The disease is mild in character and occurs among berry-pickers. Dr. Hodgetts, of Toronto, will have charge of the outbreak.

Appointment.—Dr. W. W. Ford, of McGill College, has been appointed to the new Rockefeller fellowship in the medical faculty of McGill. He will be engaged on some subject connected with the study of preventable diseases, under the direction of Professor J. George Adami. Dr. Ford will spend the coming six months at the Pasteur Institute, Paris.

Toronto General Hospital.—The patients at the Toronto General Hospital on Saturday, June 29, numbered 123 males and 68 females. Admitted during the week: Males, 27; females, 24. Discharged: Males, 38; females, 30. Decrease, 17. Average number of male patients during quarter, 163; female, 78.40. Admission during last quarter: Males, 458; females, 365. Discharged: Males, 444; females, 340.

Resolution re Ontario $2 Assessment.—At the recent meeting of the Ontario Medical Association, a resolution was passed unanimously amid hearty applause, and without a single dissenting voice congratulating the Ontario Medical Council on their determination to make practitioners pay this fee, and approving of its being levied in the future. This action of this important body will strengthen the hands of the Ontario Medical Council and enable it to relegate this bone of contention to oblivion.

New Buildings at McGill.—A graduate of the medical department of McGill University three years ago would hardly recognize the old familiar quarters if he were to return to Montreal to-day. During the past year a complete transformation has been made in the structure. The pathologic department is one of the brightest and best equipped of all the departments in the university, and will become a worthy home for the research work which will be carried on at McGill under the direction of the Rockefeller Institute.

Drinking Decreasing in Ontario.—In 1889 the convictions for drunkenness in Ontario amounted to 4797. In 1899 this had dropped to 1892, a decrease of 2905, or over 60 per cent. In 1889 there was one conviction for drunkenness for every 295 persons, and in 1899 one for every 826. The number of persons to each conviction in the provinces of Canada for the year 1899 is as follows: Ontario, 826; Quebec, 461; Nova Scotia, 448; New Brunswick, 253; Manitoba, 355; British Columbia, 207; Prince Edward Island, 341; the Territories, 180.

Infant Mortality in Montreal.—Ninety-one infants died in Montreal during the week ending Saturday, June 22, and this heavy mortality so early in the summer caused much concern among the members of the Health Committee. For the corresponding week of 1900 the number reached sixty-four and that was considered abnormally high. The principal reasons for this heavy mortality among the infant population of Montreal every summer is given as ignorance on the part of mothers as to how to feed and take care of infants; overcrowding is another cause; want of fresh air is said to be another, and noxious privy pits is set down as another cause. In 1891 Montreal contained 8528 of the privy pits, and now 5201 are in existence. Of one hundred cities in America from which statistics could be secured, Three Rivers, Quebec, has the highest death-rate and Hamilton the lowest. The death-rate in Montreal in 1900 was 24 per thousand. This is equal to New Orleans, at 24.8. The rate of Three Rivers is 36.1; of Hamilton, 12.9.

Manitoba University Prosperous.—Four hundred and seventy-three students wrote this past spring on the examinations of Manitoba University in arts, medicine and law, showing that this, the youngest university in Canada, is forging ahead at a rapid rate. Last January the university opened its new science building, which cost $60,000, where the science faculty now lecture to classes formed of the students of the five affiliated colleges. This university receives a very small grant from the Manitoba government and retains the right to appoint its own professors. Belonging to the university are some 150,000 acres of Manitoba prairie lands, which are now valued at from $750,000 to $1,000,000, and it is from the proceeds of the sales of portions of these lands that funds were secured for the new science building.

Toronto Hospital Notes.—The house surgeons for the coming year were appointed on June 28, for the Toronto General and St. Michael's hospitals. A new feature of these appointments is to be found in the selection of two and possibly three women for the staffs of the two hospitals and one for the Hospital for Sick Children. Dr. Helen MacMurchy has been appointed on the staff of the General, while Dr. Margaret MacCallum has received a similar appointment on the Sick Children's. This would seem to indicate that the women physicians had found a permanent footing in the hospitals of the city of Toronto. The members of the new staff of the General are as follows: From Toronto University—F. A. Cleland, W. H. Cromyn, H. S. Hutchison, A. J. Macdougal and J. H. Trout. From Trinity Medical College—Duncan Anderson, James E. Martin, W. J. Macdonald, E. S. Ryerson, and W. G. Collison. To the staff of St. Michael's have been appointed P. W. O'Brien, R. H. Parent and C. R. Elliott.

Executive Health Officers of Ontario.—The annual meeting of this Association was held at Brantford, Ont., on June 25 and 26, the president, Dr. W. T. Connell, pathologist of Queen's University, in the chair. Smallpox was a theme which received careful attention and school sanitation was also carefully considered. One health officer strongly condemned the kissing habit, while another moved for the appointment of county inspectors. A strong committee was formed, consisting of one member from each county in the province who will endeavor, through local committees, to have by-laws submitted to the people for the establishment of country sanatoria. Prof. J. A. Amyot, of Toronto, contributed an important paper on the "Value of Examinations of Throat Swabs as a Test of Freedom from Diphtheria." Mr. Thomas MacFarlane, chief Dominion Government analyst, contributed a paper on "Moss Purification of Closets." The following were the officers elected: President, Dr. E. E. Kitchen, St. George; vice-president, Mr. Thomas MacFarlane, Ottawa; executive committee, Dr. Pearson, of Brantford, Dr. Hoare, of Walkerville, Dr. D. Dunton, of Paris, Dr. John Herald, of Kingston, and Dr. W. J. Arnatt, of Berlin; secretary, P. H. Bryce, Toronto.

Dominion Registration.—A new suggestion to this scheme of interprovincial registration has been adopted by the Ontario Medical Council. At one of their sessions, Dr. T. G. Roddick, M.P., was present, and delivered an address upon the progress the measure had made in Parliament. The matter was referred to a special committee to report on, and a suggestion brought in by Dr. Britton appealed so strongly to the committee, and subsequently to the whole Council, that it was adopted. This may fairly be set down as the policy of the Ontario Medical Council with regard to this question of Dominion registration. The first 100 or fraction of 100 medical practitioners in each province shall be entitled to one representative. The second 100 or fraction of 100 over 50 per cent. shall be entitled to one representative, and for each subsequent 600 one representative shall be allowed. One representative shall be appointed for each province by the Governor-General in Council, and there shall also be three members elected by such practitioners in Canada as are now recognized by the laws of any province as forming a particular and distinct school of the practice of medicine, and as such are entitled to representation on the Medical Council of the Province. There shall further be one representative for each university having a teaching faculty in medicine or a medical college in affiliation with it.

FOREIGN.

Deaths Abroad.—Among the deaths reported abroad are those of Professor Langenbuch of Berlin, of H. Bauer, privat docent at Giessen, and of Dr. Assmus, the founder of the Samaritan emergency corps at Liepsic.

Smallpox in Paris.—The prophylactic measures taken in Paris against the epidemic of smallpox that has been prevailing there since the Exposition, seem to have little effect, as 1790 cases have occurred since the first of the year, with a mortality of 13 per cent.

The sewage farms around Berlin have had no cases of typhoid or malarial fever during the past year, and only 34 deaths to a population of 40,287. Recent official tests failed to disclose any pathogenic germs in the springs of drinking water or in the outflowing drains.

Plague in India.—The blue book on India, just issued, gives the plague mortality for the five years ended March, 1901, as nearly 600,000. The census shows, for the decade, an increase of less than 6,000,000, instead of the normal 19,000,000. This loss is due to famine and disease.

Professor Panas, of Paris, delivered his last clinical lecture June 17; the hall was crowded with his friends and pupils. Twenty-two years previously on that date he assumed the duties of the newly-created chair of ophthalmology, and to his efforts since is due in great measure the progress of this branch of medicine in France.

Honors to Porro.—May 21 was the twenty-fifth anniversary of the day when Eduardo Porro, of Pavia, performed for the first time the operation that bears his name. Laparotomy was rare in those days and Cesarean section was considered extremely dangerous. Porro was considered a reckless enthusiast and actually threatened with criminal proceedings. His friends and pupils celebrated the anniversary by presenting the master with a gold medal and commemorating the event in other ways.

Medical Chemistry Course at the Institut Pasteur.—A new service has been created at the Pasteur Institute of Paris, called "Service d'analyse et de chimie appliqué à l'hygiène." A course is given which is intended for physicians, pharmacists, and for chemists desiring to familiarize themselves with the manipulations of medical chemistry, analysis of food-stuffs and industrial chemistry where the biological phenomena play a part. The lectures and laboratory work continue during six months, entitling the student to a certificate for the work passed. The course begins in November, 1901, and those desiring to enroll themselves can do so by writing to the Pasteur Institute, Paris.

Germany Lowers the Medical Standard.—The German Bundesrath has officially approved the measure admitting graduates of the technical schools to the medical courses in the universities, in spite of the protests of the profession throughout the country. The *Deutsche Med. Woch.* calls upon physicians to do all in their power to nullify the probable evils of the measure. This, it believes, can best be accomplished by informing the public of the deplorable pecuniary condition of the medical fraternity by addresses at suitable places, articles in the lay press, and especially by a prize pamphlet for wide distribution among parents, like the pamphlet on the evils of quackery, of which 28,000 copies had been distributed up to last October. Medical associations are urged to consider the matter at once. The new measure admits graduates of the Realgymnasien unconditionally, but graduates of the Oberrealschulen have to pass an examination in Latin.

British Congress on Tuberculosis.—This congress will be held at the Queen's Hall, London, from Monday, July 22, to Friday, July 26. There will be four sections: 1, State and Municipal, president, Sir Herbert Maxwell; 2, Medical, including Climatology and Sanatoria, president, Sir Richard Douglas Powell; 3, Pathology, including Bacteriology, president, Prof. G. Sims Woodhead; 4, Veterinary (Tuberculosis in Animals), president, Sir Geo. Brown. The following public addresses will be given to the whole Congress: On Tuesday, by Prof. Koch of Berlin; on Wednesday, by Professor Brouardel of Paris, and on Thursday by Professor McFadyean of the Royal Veterinary College. On the concluding day there will be a final meeting to pass resolutions arising out of the work of the Congress. A number of receptions, excursions, etc., have been planned and a large attendance on the Congress is anticipated. It is possible that on this account the general meetings will be held in St. James Hall, as that is specified in the circular of invitation.

German Congress of Dermatology.—The seventh annual congress of German dermatologists was held at Breslau, the last of May, and was principally devoted to demonstrations and discussions. Neisser exhibited plaster casts of an exanthem resembling in every respect a typical papular syphilid, taken from a pig inoculated with syphilis. Wolff has also had similar success in experimental inoculation. Riehl advocated treating pregnant syphilitics with a local suppository containing 1 gm. of blue ointment, as supplementary to general specific measures. By this means he has succeeded in preventing abortions and syphilitic degeneration in the offspring. Schaeffer reported that the local application of heat to inflammatory cutaneous processes arrested the leucocytosis and transformed the process to a mere serous impregnation and hyperemia. Plato lauded the antiphlogistic action of alcohol compresses. Loewenhardt confirmed the diagnostic value of Roemann's method of testing the functions of the kidneys by the electric conductibility of the urine. Scholz and several others described the remarkable benefits derived from thiosamin in the correction of scar-formation and sclerodermia. The former injects ten parts of thiosamin to twenty parts glycerin and seventy parts water, and exhibited a case of extensive lupus which had threatened deforming contraction of the mouth and nose from the cicatrices until the morbid tendency was arrested by the injections. The sensation of the congress, however, was the presentation of a number of patients cured of lupus at Finsen's "Light Institute." Some were under treatment for an hour a day for a year, in others the cure was more rapid.

PARIS LETTER.

Sanatoria for Consumptives.

The question of sanatoria for consumptives has occupied the attention of the medical public in France to a considerable extent during the last two or three years, and efforts have been made to find the funds necessary to erect a certain number of them. One of the latest constructions of this kind is the sanatorium of Agincourt, which was inaugurated in October last and which has room for 70 inmates. A recent investigation made by the director of the Hauteville sanatorium has shown that there are numerous defects in the organization of this institution. Architecturally the buildings are quite imposing, and perhaps too much stress has been laid on this. The whole of the ground floor has been sacrificed to the hydrotherapic establishment of the medical service, and the storehouse. On the other hand, as not enough room for the patients could be found on the other floors, the attics have been arranged for them. The veranda is not well disposed, being exposed to both wind and rain, but there are several parlors where the patients can congregate, and the dining-room, though perhaps too small, is well aired. Several other defects were noticed, such as the distance at which the kitchen has been placed from the dining-room. The German idea of having a physician as director of the establishment, taking a fatherly interest in the condition of his patients, and being able to watch the nurses and attendants at all times, has not been carried out, and it would certainly be much better to have it done, so that the life at a sanatorium should not resemble too much that in a hospital.

Waldeck-Rousseau's Circular on Antidiphtheric Serum.

It is generally supposed that antidiphtheric serum containing any slight deposit is not so efficacious as the perfectly clear serum, and a certain number of physicians refuse to use any such, as they feel they may cause some harm by doing so. Mr. Waldeck-Rousseau, the Minister of the Interior, has sent a circular to the sanitary inspectors concerning this matter. He remarks that the statistics published by the different inspectors give variable results as to the mortality from diphtheria, and this must be due in part to the treatment followed out. Some physicians are unwilling to use old serum, and lose precious time while waiting for some new. Recent experiments have shown that the properties of serum are still intact after a year, and as for the deposit so often seen, it is in nowise an indication that the serum is worthless. If the injection is made the day the false membranes appear, the death-rate is only 2 per cent., the second day it goes up to 6 per cent., the third day it goes up to 30 per cent., and it is 50 or 60 per cent. the fourth day. Dr. Chantemesse, who is in charge of the hospital for diphtheritic patients, spoke on the same subject at a recent meeting of the Medical Society of the Hospitals. He remarked that physicians had been frightened by the reports of accidents that had taken place as a result of the use of these injections, and he wished to say that there had been a good deal of exaggeration about this. In six years time he had never had occasion to notice any in any infant service he had had. He had noticed that only 5 per cent. had received an injection. From March, 1896, to March, 1901, he received into his service 476 children suffering from diphtheria, and 70 per cent. of them died, which is a mortality of 16.80 per cent.; most of these died the first three days, having been already in a very serious condition. It should be laid down as a rule that one should not wait until a bacteriological examination has been made, but inject all suspicious cases. Dr. Chantemesse's experience has shown him that serum containing a slight deposit was just as active.

Widal's Sero-Diagnosis—New Statistics.

A Danish physician, Dr. Tobiesen, has just published some important statistics on Widal's sero-diagnosis in typhoid fever, founded on 350 cases. There was a positive result in 329 cases with a 1 in 10 solution. Seventeen gave a result with dilutions varying from 1 in 10 to 1 in 25. In two cases there was no

result, and in two others with one in five. In thirty cases of death followed by an autopsy, the clinical and bacteriological diagnosis was confirmed by the autopsy. Out of 36 deaths the sero-diagnosis was positive in 35 cases, in the thirty-sixth case it was hardly perceptible with a 1 in 10 solution. As a means of diagnosis this method is excellent, as applied to 289 patients forty hours after admission, it was positive in 215 cases. Dr. Tobiosen examined also a certain number of other patients, 151 in all, and obtained a 1 to 10 reaction in 25 cases and a 1 to 25 in 4 others. Sixty-one healthy subjects gave 8 positive reactions at 1 to 10, and 1 at 1 to 25. It would seem to the author that the sero-diagnosis was only of value in case 1 to 50 dilutions gave a result.

Mercurial Injections.

Dr. Dienpart has just published a work on the treatment of syphilis by injections, in which he analyzes the results of 1062 observations, most of which have been collected in the service of Dr. DuCastel. Seventy-eight injections of calomel were followed by rather indifferent therapeutic results, and gave rise to such complications as pain, inflammatory nodi, but there was neither stomatitis nor diarrhea. One hundred and fifty injections of salicylate of mercury were made according to the formula of Dr. Hallopeau, 14 centigrams being used each time. No serious accidents occurred, but the curative action hardly seemed sufficient. Three hundred and nineteen injections of gray oil were followed by frequent stomatitis, and only cured slight cases, and their use in ordinary practice is rather difficult. Fifteen observations were furnished by Professor Dieulafoy where the solution of biniodid and oil was employed. The results were excellent, especially in visceral syphilis, but a daily visit is found necessary in such cases. The best preparation is the bichlorid serum of Cheron, which only needs to be injected once a week. There is a special tonic action due to the use of the saline solution. The results were most satisfactory.

Pozzi's Speech at Opening of Gynecological Course.

Dr. Pozzi, who has been named professor of gynecology, gave his first lecture at the Broca hospital two weeks ago. He showed in his speeech how difficult it had been to obtain the creation of a professorship of gynecology in Paris, and how he had been working to achieve this during the last seventeen years. It was after a trip to Freiburg in Breisgau, where he visited Professor Hegar's service, that he made out a report which he sent into the faculty, which refused to consider his proposal to deliver lectures. In 1887 he was able to give a supplementary course, and he had always tried to obtain for gynecology a better footing than that which it had at first enjoyed. Specialists were looked upon with some disfavor at first, in France, and the services they could render were but tardily acknowledged. Dr. Pozzi gave a short history of the progress of surgical science, and spoke of the conservative tendencies which were beginning to be felt.

Correspondence.

The Canteen.

HARTFORD, CONN., June 27, 1901.

To the Editor:—I have received some letters from members of the Association who were not present at the St. Paul meeting inquiring if the canteen resolutions passed expressed the judgment of the Association at this meeting. I answer, emphatically, "No." No reliable grouping of facts and conclusions on a question on the good or the bad results from the canteen can be settled from six months' experience or the personal observation of any small number of men, and no question of practical science should ever be forced on the Association in the last hour of its session as if afraid of an open, fair discussion. Beyond this the passage of these resolutions was dangerously revolutionary, indicating the possibility of committing the Association to the indorsement of theories and conclusions which any group of men may formulate and shrewdly wait for an opportunity to have them passed. From the earliest time this Association has refused to sell its influence and prestige for the advancement of any partisan or disputed questions. Almost every year resolutions have been offered indorsing various disputed questions of science and hygiene, some of which were of great interest. These resolutions have always been sent back from the committees to whom they were referred as inexpedient and unwise to be recognized formally by the Association. It is apparent to everyone that it would be suicidal for the Association to take part in controversies on unsettled questions where good men equally competent differ widely as to the facts and their meaning. The Association should always represent the best judgment and convictions of facts that are beyond the range of partisan controversy, and should never be at the mercy of a few men who may force their indorsement of any theory or resolution, particularly by methods that are unusual and in the spirit of dogmatism. All such resolutions point out a source of weakness in the organization, and also indicate a recklessness on the part of partisans who take advantage of this fact. It is very evident that at the next meeting some important changes in the constitution and by-laws should be passed to make it impossible for any faction to commit the Association to the indorsement of views and theories which they wish to formulate. If these canteen resolutions are sustained as the experience of the American Medical Association, the door is open for any supporters of other radical theories or statements which may be offered and pressed to a final vote of acceptance at the right moment by shrewd promoters. I am positive in the assertion that these resolutions utterly fail to represent the conservative judgment of the Association, for the reason that there are medical men as competent to judge, and authorities as reliable, who denounce the canteen and all efforts to reinstate it. In this conflict of theory and opinion the great army of the profession refused to be committed to any one view, but hold themselves open for farther and more conclusive evidence. All scientific sense and good judgment is outraged by immature conclusions and attempts to force opinions and secure their indorsement as final. While the Association as a body is always open to hear the evidence offered by both sides, its final judgment and conclusion to be of any value must be of slow growth and be above all possible suspicion of bias and feeling. If these resolutions do nothing more than awaken the Association to the need of providing against any farther possibility of its prestige and influence being bought and sold to the shrewd manipulator with some motive behind, they will have accomplished a great work.

Outside of the merits of this question, all such resolutions commit the Association to battle grounds of partisanships from which nothing but evil can come. The recognition and acceptance of facts is as inevitable as the growth of the seasons, and no controversy or indorsement is needed, and the canteen or anti-canteen will be decided higher up, and on a very different plane from that of its present partisans.

T. D. CROTHERS, M.D.

"A New Operative Method for Exposing the Seminal Vesicles and Prostate for Extirpation"—A Reply.

NEW YORK CITY, June 29, 1901.

To the Editor:—I am very sorry that Dr. Pyle in his letter in the issue of June 15, questioning my claim to originality with reference to the above operative procedure which appeared in THE JOURNAL of May 4, did not incorporate my reply to the letter he had previously sent me on the subject; had he done so I should not now have occasion to continue the correspondence.

On May 24, I received the following communication from Dr. Pyle:

[Copy] "TOLEDO, OHIO, May 23, 1901.

"*Dr. Eugene Fuller, New York:*

"*Dear Doctor:*—I have had the pleasure of reading your article in THE JOURNAL of the A. M. A., upon a supposed "New Method" of removing the prostate gland, etc. I am somewhat surprised to see from New York sources so many slight modifications of the same operation which I performed and fully laid claim to over eight years ago. About every year some surgeon in or about New York brings out a modification of my operation and claims it as his own without even a mention of my publication or claims. This is, indeed, unjust and unprofessional if the facts are known to the new claimants. I hope that you will make known to the readers of the AMERICAN MEDICAL ASSOCIATION JOURNAL that you have advanced no new ideas,

unless it is changing my dorsal position into a ventral. I have thoroughly covered every claim for the operation which you make and gave this information to the medical profession as early as May, 1892. Look the matter up. I inclose a reprint from the *Philadelphia Medical Journal* that will afford all the data necessary. Very truly,

[Signed] "JOHN S. PYLE."

To the above letter I sent the following reply:

"NEW YORK, May 24, 1901.

"*Dr. John S. Pyle:*

"*Dear Sir:*—In reply to your letter I would state that while writing my recent article I was already cognizant of what you had published. As, however, the operative method you reported in 1892 belonged to Zuckerkandl, who first published it in 1889 *(Wein. Med. Presse)*, I saw no good reason for mentioning you among the original workers in the field. I really do not see that I have anything to apologize to you for. If I were in your place, however, I should feel like making an apology to Zuckerkandl. Yours truly,

[Signed] "EUGENE FULLER."

Dr. Samuel Alexander of this city tells me that some time ago Dr. Pyle wrote him also, complaining that something he (Alexander) had written in connection with perineal prostatectomy encroached on his (Pyle's) operative territory. Dr. Alexander further informed me that he at the time wrote Dr. Pyle, giving references to the literature on the subject which showed that Dr. Pyle's operation was not original with him. Dr. Pyle's photograph in his article which appeared in the *Philadelphia Med. Journal*, April 1, 1899, shows that his incision is an exact copy of the Zuckerkandl incision.

In the light of my letter to Dr. Pyle, and of Dr. Alexander's correspondence with him, it hardly seems to me that that gentleman has any justification in still ignoring Zuckerkandl and in persisting in his claim to originality. In referring to such action, Dr. Pyle in his letter to me states:

"This is, indeed, unjust and unprofessional if the facts are known to the new claimants."

I have given Zuckerkandl full credit in my article for his work. I am perfectly willing to leave to the medical profession the settlement of the question of credit in this connection. If one will try both the Zuckerkandl operation (the one Dr. Pyle does) and the one I have advocated, he will then be in the proper position to see the radical difference between the two procedures. Yours respectfully,

EUGENE FULLER, M.D.

Normal versus Decinormal Salt Solution.

AFTON, IND. TER., June 20, 1901.

To the Editor:—In THE JOURNAL of June 15 is a communication from Dr. C. S. Minnich on normal salt solution; he concludes that the solution meant is the "decinormal," not "normal." "Normal" means "the rule," the general average; if a man, a horse, or a cow has the normal number of teeth, it has the number which is the rule for the species; if a man has in his blood-serum sodium chlorid to the amount of 0.6 to 0.8 per cent., then he has the normal amount; normal for a chemist's test solution or reagent, and normal for human blood are two wholly different "normals;" universal agreement could be made whereby the normal and decinormal of the chemist could be changed; but environment has been unable to change the blood serum of terrestrial animals very much from the sea water, which was their original habitat.

Professor Fish, of Cornell, in his recent article on the blood, in the "Reference Hand-Book of the Medical Sciences," places the soluble inorganic salts at 6.4 parts per 1000, "the principal salt is the chlorid of sodium:" (Edition of 1901, vol. ii, p. 35.) Flint, "Physiology," Fourth Edition, p. 21, places the inorganic salts at 6 to 8 parts per 1000. Samuel M. Brinckner, in "Foster's Reference-Book of Practical Therapeutics," vol ii, p. 321, says: "In the serum of the normal (not decinormal) human body sodium chlorid is found in the proportion of 0.6 per cent. This has been named the normal or physiological salt solution." Now, assuming that the general average, the standard, or the *normal* is 0.6 per cent. and the weight of a pint of distilled water at 60 F. is 7291 grains, then 0.6 per cent. is 43.746 grains of sodium chlorid to make a "physiological" or "normal" salt solution; this is 87.5 grains to a quart, which *happens* to be nearly the same as Dr. Minnich's "decinormal" solution of 89.9 grains, but he again proves himself inexact, for 89.9 grains is the amount for a liter, and a liter is 1.0565 of a quart; more, by nearly 6 per cent. Chemical knowledge is a fine thing, but one must not try to impose arbitrary chemical standards on nature, who fixed her "normals" at a time when the memory of man "runneth not to the contrary." Very respectfully,

R. H. HARPER, M.D.

The X-Ray in Quackery.

To the Editor:—In the issue of March 2, there was published an interesting editorial headed: "The *X*-ray in Quackery," which was quite prophetic. Here is the essence of a letter sent me by an upright, intelligent physician from Iowa, which explains itself: "Within a few miles from my office lives a priest-physician who claims to have an improved *x*-ray machine by means of which he told a patient that he had an attack of cystitis, and another that he had a cancer in the stomach and that a few nodules had developed within the last ten days, etc."

The physician, who is anxious to do good work and desired to secure the best apparatus to become as perfect a diagnostician as possible, consulted me concerning the possibilities of the *x*-ray. It is scarcely necessary to inform you that I denounced the priest as a quack and assured my medical friend that there is no machine discovered as yet, which can "transform a human being into glass."

The time is not far distant when the following "Ad." will appear in the newspapers:

"The Microscope outlived! By means of our special improved *x*-ray machines, in a few seconds we can watch how your food is digested in the stomach and how the cells in the brain collapse! Do you suffer from indigestion or headache—come to our laboratory—we will let you see yourself as if you were made of glass!"

What a bad world to live in! Barnum was right: The people want to be humbugged—the quacks are accumulating bank accounts, while the scientific and conscientious practitioner is probably worrying how to meet his rent.

This is all abnormal. There are ways and means to crush quackery if the American physicians were united, but that, so far, is an Utopian dream. *Sic transit gloria mundi!*

Respectfully yours,

GUSTAVUS M. BLECH, M.D.

The Virchow Fund.

NEW YORK CITY, July 1, 1901.

To the Editor:—Some months ago a committee consisting of Dr. Reed, President of the American Medical Association, Dr. Bowditch, President of the Congress of American Physicians and Surgeons, Dr. Weir, President of the New York Academy of Medicine, Dr. Welch, of Johns Hopkins University, and the undersigned secretary, published an appeal to the American medical profession requesting contributions to the Virchow fund which was established ten years ago in honor of Rudolf Virchow's 70th birthday, which was reached Oct. 13, 1891. The fund was created for the purpose of fostering biological, anthropological and general medical research. A large German Committee, with national committees formed all over the globe, has undertaken to increase this fund in honor of the coming 80th birthday of the great medical reformer.

Whatever contributions will be raised should be sent to Germany on the first day of September in order to be received and acknowledged by the central committee in due time. As our former notices may have been overlooked by such as are anxious to show their appreciation of the great master and to aid the cause represented by his life-long labors, we herewith repeat our appeal. A. JACOBI, M.D., Secretary,

110 West 34th Street.

Book Notices.

ATLAS AND EPITOME OF THE NERVOUS SYSTEM AND ITS DISEASES. By Professor Dr. Christfried Jakob, of Erlangen. From the Second Revised German Edition. Edited by Edward D. Fisher, M.D., Professor of Diseases of the Nervous System, University and Bellevue Hospital Medical College, New York. With 83 plates and copious text. Cloth, $3.50 net. Philadelphia and London: W. B. Saunders & Company. 1901.

This work has been for some time known to students in its German edition and this authorized translation under the direction of Dr. Fisher will widely increase the knowledge of its advantages. As the Editor says and we can thoroughly agree with him, there is, so far as known, no work in which so much is compressed within so small a space, and it fills a place in the literature that has long needed such filling. The illustrations are well selected and exceedingly good. The explanations are clear and ample. The book is divided into six parts: 1, the morphology of the nervous system; 2, its development in structure and histology; 3, the anatomy and physiology of the more important nerve pathways; 4, general pathology and treatment of diseases of the nervous system; 5, special pathology; it concludes with some remarks on autopsy and microscopic examinations. The book has an excellent though not too extensive index. The translation, so far as we have been able to examine the work, seems to be a satisfactory one; and the book being one of the series known as Saunders' Medical Hand-Atlases, nothing need be said as to the beauty of the illustrations.

ATLAS AND EPITOME OF LABOR AND OPERATIVE OBSTETRICS. By Dr. O. Schaeffer, of Heidelberg. From the Fifth Revised German Edition. Edited by J. Clifton Edgar, M. D., Professor of Obstetrics and Clinical Midwifery, Cornell University Medical School. With 14 lithographic plates, in colors, and 139 other illustrations. Cloth. Price, $2.00 net. Philadelphia and London; W. B. Saunders & Company. 1901.

Outside of anatomy there is no branch of medicine and surgery that is as difficult to demonstrate as that of obstetrics, and it might be said with truth, as regards many colleges, that there is no important part of the physician's duty that is so poorly taught as midwifery. Hence, the young physician, anxious to understand and to be prepared for the various complications in this part of his work, will be more than gratified at the graphic and practical illustrations contained in this little book. These illustrations in colors are works of art, and cover all the various positions, normal and abnormal, and illustrate all the operations in midwifery, including Cesarean section. While sufficient text accompanies the illustrations to explain them, the book is not intended as a text-book; but as a companion to the ordinary text-book on obstetrics it will be a great help to the beginner.

THE EXTRA PHARMACOPEIA. By William Martindale, F.L.S., F.C.S., Late President and Examiner of the Pharmaceutical Society, and W. Wynn Westcott, M.B., Lond., D.P.H., Coroner for Northeast London. Tenth Edition. Cloth. Pp. 688. Price, 10 shillings, 6 pence. London: H. K. Lewis. 1901.

This little book has been brought up to date, including the results obtained through revisions of the various Pharmacopeias since the last edition of the British Pharmacopeia. It is conveniently arranged, and contains all the preparations of the British Pharmacopeia, with references to therapeutic experience from various sources. It embodies a list of the drugs, as well as the sections on antitoxin and organotherapy, analytical memoranda with chemical tests, etc., and a therapeutic index of diseases and symptoms. The journals referred to are largely British, though a few American ones are included. A rather significant and useful table gives the 121 preparations most commonly ordered in the total of 25,000 prescriptions, which forms, as the author says, a therapeutic reflex of British medical practice. The addenda generally are very convenient for reference, and as the preparations of the British Pharmacopeia are often referred to in American medical literature, the usefulness of the work to American readers can be readily appreciated.

ORAL SURGERY. A Text-Book on General Medicine and Surgery as Applied to Dentistry. By Stewart Le Roy McCurdy, A.M., M.D., Professor of Anatomy and Surgery, Pittsburg Dental College. Cloth. Pp. 368. Price, $3.00 net. Pittsburg, Pa.: The Calumet Publishing Co. 1891.

This little volume is intended especially for the "practicing dentist." The author says that "general pathology can in no way differ from pathological changes in the mouth up to a certain period, etc." While the clumsily expressed principle outlined herein is to a certain extent correct, still the subject is treated in a very superficial manner. Special works on general medical subjects for the dental practitioner were once needed, but since the specialty is a department of medicine such works are no longer required. The author offsets unsound dictum by the remark that "some knowledge of all these subjects, however, is necessary." Dental specialists, however, require as much medical training as ophthalmologists, rhinologists, otologists, etc.

The oral surgeon will gain no general knowledge from this book, at least not sufficient to pay for the time lost in its perusal. The oral or dental surgeon is hungry for general pathology and underlying principles, but these must be obtained from standard works upon practice and pathology.

APHORISMS, DEFINITIONS, REFLECTIONS, AND PARADOXES, Medical, Surgical and Dietetic. By A. Rabagliati, M.A., M.D., F.R.C.S. Ed., Late President of the Leeds and West Riding Medico-Chirurgical Society. Cloth. Pp. 291. Price, $2.50. New York: Wm. Wood & Co. 1901.

This work is a series of reflections on medical subjects; largely on the importance of diet and its errors in the production of disease. The author is a neologist from the beginning, though the additions to our language which he makes are not so numerous as they are prominent in this book. It is a thoughtful work that almost any physician can pick up and read with interest, though he may occasionally find some minor point where he may disagree with the author. Nearly all disorders, according to the author's views, arise from errors in the diet; eating too much, or eating too often, or what he calls polysiteism and pollaki-siteism. The book belongs to a class that is perhaps less common at the present time than it was earlier in the history of medicine, but that does not mean that it is a work behind the times. It contains a great deal of valuable matter that is suggestive where it may not be directly instructive, and it often is both.

PATHOLOGY AND MORBID ANATOMY. By T. Henry Green, M.D., F.R.C.P., Physician and Special Lecturer on Clinical Medicine at Charing Cross Hospital. Revised and Enlarged by H. Montague Murray, M.D., F.R.C.P., Physician to Out-patients and Lecturer on Pathology and Morbid Anatomy at Charing Cross Hospital. Ninth American Revised from the Ninth English Edition by Walton Martin, Ph.B., M.D., Assistant Demonstrator of Anatomy, College of Physicians and Surgeons, Columbia University. With 4 colored plates and 339 illustrations. Cloth. Pp. 585. Price, $3.25. Philadelphia and New York: Lea Brothers & Company. 1900.

Green's pathology has been before the student public of this country so long and is so well and favorably known, that a new and thoroughly revised edition should be welcomed. In this volume, the English edition has been thoroughly revised by Dr. H. Montague Murray, a large part of the subject matter rewritten, and the American edition has been edited by Dr. Walton Martin, who has supplied special chapters. The work in its present form deserves to fully retain the favor that it has heretofore received.

A MEDICOLEGAL MANUAL. By William W. Keysor, Lecturer on Medical Jurisprudence in the Omaha Medical College, and Judge of the District Court, Omaha, Neb. Cloth. Pp. 316. Price, $2.00. Omaha: The H. J. Penfold Co. 1901.

This work is the production of a lawyer rather than a physician, and therefore, we may look for some errors on the purely medical side. For example, in defining delusion, the author seems to have a very imperfect appreciation of the meaning of the word. Another instance is in his mention of certain forms of monomania so-called, among which he includes puerperal mania as a disposition of women recently delivered to destroy

their offspring. The legal side of the work, however, we can not criticise, and presume that it is correct and reliable as regards special legal points where medical questions are not especially involved, at least as of first importance. While we can not advise it as a perfectly correct and safe manual to follow on medical questions, on other points it may be and probably is satisfactory.

ATLAS AND EPITOME OF OBSTETRIC DIAGNOSIS AND TREATMENT. By Dr. O. Schaeffer, of Heidelberg. From the Second Revised German Edition. Edited by J. Clinton Edgar, M.D., Professor of Obstetrics and Clinical Midwifery, Cornell University Medical School. With 122 colored figures on 56 plates, 38 other illustrations, and 317 pages of text. Cloth. Price, $3.00 net. Philadelphia and London: W. B. Saunders & Company. 1901.

This volume is really a companion to the volume referred to above, and all that is said of that volume could be repeated here. The book now before us is, however, more pretentious, is more of a text-book and has a greater didactic value. The illustrations are of the same high order that has characterized this series of Medical Hand-Atlases. The extremely low price at which such books can be sold is possible only from the fact that the plates are used to print not only the series published in this, but a similar series in several other countries.

A SHORT PRACTICE OF GYNECOLOGY. By Henry Jellett, B.A., M.D., B.Ch., B.A.O. (Dublin University), F.R.C.P.I., L.M., Late Assistant Master, Rotunda Hospital. With 125 Illustrations. Cloth. Pp. 436. Price, $2.63. London: J. & A. Churchill, Philadelphia: P. Blakiston's Son & Co. 1900.

This work was written, as the author says, for the object of affording a concise account of gynecologic diseases and their treatment. He has certainly condensed within its four hundred and odd pages a large amount of information. He has used material from various sources, both in the selection of illustrations and by consulting authorities. There is nothing theoretic about it; various conditions and operations are described in a brief, concise way, and the illustrations are generally well selected for the purpose of illustrating the conditions. We would not advise it as a text-book to supplant the larger and more thorough works, of which there are so many, but in its small way it will fill a useful place.

A PRACTICAL TREATISE ON DISEASES OF THE SKIN, for the Use of Students and Practitioners. By James Nevins Hyde, A. M., M. D., Professor of Skin, Genito-Urinary and Venereal Diseases, Rush Medical College, and Frank Hugh Montgomery, M. D., Associate Professor of Skin, Genito-Urinary and Venereal Diseases, Rush Medical College. Sixth and Revised Edition. Illustrated with 107 engravings and 27 plates in colors and monochrome. Cloth. Pp. 828. Price, $4.50. Philadelphia and New York: Lea Brothers & Co. 1901.

Sufficient evidence of the popularity of this treatise is given by the fact that this, the sixth edition, follows the fifth in practically a year. The authors have taken advantage of the opportunity for further revision of the work and brought it down to date, many of the chapters being entirely or partly rewritten, with the addition of some new plates and engravings.

OBSTETRICS. A MANUAL FOR STUDENTS AND PRACTITIONERS. By David James Evans, M.D., Lecturer on Obstetrics and Diseases of Infancy, McGill University, Montreal, Canada. Series Edited by Bern B. Gallaudet, M.D., Demonstrator of Anatomy and Instructor in Surgery, College of Physicians and Surgeons, Columbia University, New York. Illustrated with 149 engravings. Cloth. Pp. 430. Price, $1.75. Philadelphia and New York: Lea Brothers & Company.

This is one of Lea Brothers' pocket text-books requiring a rather large pocket, but it appears to be one that will fill a useful place and be a convenient reference handbook on obstetrics. The book is well illustrated and clearly written, and is apparently all that it pretends to be.

LESSONS IN THE ANATOMY, PHYSIOLOGY AND HYGIENE OF INFANCY AND CHILDHOOD, for Junior Students. By Alfred C. Cotton, A.M., M.D. Cloth. Pp. 174. Illustrated. Price, $1.50. Chicago: Chicago Medical Book Company. 1901.

This volume comprises extracts from lectures delivered by the author at Rush Medical College, on the anatomy, growth, physiology and hygiene and nourishment, of the new-born, with chapters on milk analysis, weaning, foods, etc. The work is fully illustrated and contains much practical information on the subjects treated.

ECZEMA, with an Analysis of Eight Thousand Cases of the Disease. By L. Duncan Bulkley, A.M., M.D., Physician to the New York Skin and Cancer Hospital. Third Edition of Eczema and its Management entirely Rewritten. Cloth. Pp. 368. Price, $1.25. New York and London: G. P. Putnam's Sons. 1901.

The third edition shows a vast amount of creditable work, but hardly reaches the standard of the preceding edition. Condensation would have added materially to the value of the volume.

A COMPEND OF DISEASES OF THE SKIN. By Jay F. Schamberg, A.B., M.D., Professor of Diseases of the Skin, Philadelphia Polyclinic and College for Graduates in Medicine. Second Edition, Revised and Enlarged. With 105 Illustrations. Cloth. Pp. 291. Price, $0.80. Philadelphia: P. Blakiston's Son & Co. 1900.

This little work is a successful compilation and a very useful volume to the student.

Married.

C. H. WAITE, M.D., to Miss Constance Webber, of Ann Arbor, June 20.

ALBERT A. WHITE, M.D., Trinidad, Colo., to Miss Bixler, of Denver, June 12.

CHARLES E. HUMISTON, M.D., Chicago, to Miss Myrtle J. Wheeler, June 17.

CHARLES EMIL BRACK, M.D., to Miss Mary A. Grob, both of Baltimore, June 9.

WILLIAM E. BURTON, M.D., to Miss Blanche V. Dougherty, at Baltimore, June 12.

HERBERT W. RAYNER, M.D., to Miss S. Lois McChesney, of Minonk, Ill., June 24.

WILLIAM ALBERT NITZE, M.D., to Miss Annina Hilken, both of Baltimore, June 8.

JOHN D. DAMERON, M.D., to Miss Ella Wheeler, both of Stockton, Cal., June 12.

HERMAN S. JUDD, M.D., Lead, S. D., to Miss Marie Norton, of Topeka, Kan., July 3.

ARNOLD A. D'ANCONA, M.D., to Mrs. Lillian D'Ancona, both of San Francisco, June 10.

JOHN MANN, M.D., to Miss Nannie Caskie Scott, both of Petersburg, Va., June 19.

CARL RAVER, M.D., Sacramento, Cal., to Miss Tina Masten, of Ann Arbor, Mich., June 21.

LESLIE W. SNOW, M.D., to Mrs. Ida Daynes Cannon, both of Salt Lake City, Utah, June 11.

JOHN B. SLICER, M.D., to Miss Eva Cecilia England, at Elkton, Cecil County, Md., June 12.

PERCY LOUIS KAYE, M.D., Philadelphia, to Miss Marie L. Waltham, of Baltimore, June 20.

JAMES FOSTER SCOTT, JR., M.D., to Miss Fannie George, of Blooming Grove, Texas, June 12.

ALFRED O. PETERSON, M.D., Omaha, Neb., to Miss Eva Newbie Bolshaw, of Lincoln, Neb., June 12.

ALEXANDER J. SLAVEN, M.D., to Miss Tassie Katherine Ohmer, both of Dayton, Ohio, June 10.

FRED JACKSON JARVIS, M.D., Delta, Iowa, to Miss Irene E. Parsons, of Iowa City, Iowa, June 20.

UPTON DARBY NOURSE, M.D., to Miss Alice Windsor, at Darnestown, Montgomery County, Md.

WILLIAM R. MARSDEN, M.D., Utica, N. Y., to Miss Rose Olive Stevens, at Whitesboro, N. Y., June 12.

MELVIN C. MILLET, M.D., Rochester, Minn., to Miss Mary Albertine Frick, of Minneapolis, June 12.

WILLIAM BULLOCK, M.D., Grundy Center, Iowa, to Miss Nellie Kessler, of Solon, Iowa, June 19.

EDWARD T. BURNHAM, M.D., Wilmington, Del., to Miss Elma Cecilia Sheppard, of Baltimore, June 19.

FRED HARWOOD POWERS, M.D., to Miss Celeste Webb, at Vienna, Dorchester County, Md., June 19.

THEODORE STUART HART, M.D., to Miss Mary Ayers Wolcott Robbins, both of New York City, June 26.

JAMES FRANCIS MCKERNON, M.D., to Miss Anna Madeline Wittmeyer, both of New York City, June 26.

SAMUEL BOYCE CRATON, M.D., to Miss Annie Fairbanks Hutchinson, both of Syracuse, N. Y., June 12.

WILLIAM T. BARRY, M.D., Salinas, Cal., to Miss Julia V. Morse, of Chicago, at San Francisco, May 28.

CHARLES A. SINSEL, M.D., Grafton, W. Va., to Miss Mary Davidson, of Taylor County, W. Va., June 19.

WILLIAM H. HARRISON, M.D., Houston, Texas, to Miss Nannie J. Robinson, of Chattanooga, Tenn., at Houston, June 19.

ERASMUS MORTIMER GARROTT, M.D., to Miss Mary Kretzer Adams, both of Sharpsburg, Washington County, Md., June 12.

HARVEY MOORE WALLACE, M.D., Spottswood, Augusta County, Va., to Miss Lucy Waddell Baker, of Staunton, Va., June 5.

ALEXANDER F. MAGRUDER, M.D., a retired naval officer with the rank of inspector, of Washington, D. C., to Mrs. Ida Newton Gulick, of New York, at Baltimore, June 20.

SIDNEY O. HEISKELL, M.D., assistant health commissioner and superintendent of the quarantine station, Baltimore, to Dr. Doralyn Bryan, formerly head nurse at Baltimore University Hospital, at Philadelphia, June 11.

Deaths and Obituaries.

Erastus J. Buck, M.D., Jefferson Medical College, Philadelphia, 1854, who was injured in a runaway accident June 7, died at his home in Platteville, Wis., June 21, aged 72. He was a member of the Wisconsin legislature in 1860-1861, raised a company of sharpshooters in 1861, served as first lieutenant, then resigned to become surgeon, and in this capacity served throughout the war. He had practiced in Platteville since 1868. He was a member of the American Medical Association.

Edwin E. Waite, M.D., Bellevue Hospital Medical College, New York, 1877, a well-known practitioner and some-time physician to the overseers of the poor, and city physician of New Bedford, Mass., died at his home in that city, June 20, from pulmonary hemorrhage, after a long illness, aged 43.

Robert J. Martin, M.D., New York University, 1887, a leading young physician of Augusta, Me., and surgeon of the Second Infantry, N. G. S. M., lost his life, June 16, while endeavoring to save a woman from drowning at Belgrade Lakes, near Augusta. He was 36 years of age.

George W. Beal, M.D., Ohio Medical College, Cincinnati, 1863, a pioneer of Montana, died June 8 at his home in German Gulch, Mont., from shock consequent on injuries received by a fall from his wagon, aged 75. He was mayor of Butte in 1881 and prominent in territorial politics.

Ludwell G. Thacker, M.D., Bellevue Hospital Medical College, New York, 1866, a prominent physician of Northwestern Ohio, and a member of the American Medical Association, died at his home in Defiance, June 20, from consumption, aged 48.

Charles P. Chesley, M.D., Cooper Medical College, San Francisco, 1870, an esteemed practitioner of San Francisco, and a member of the American Medical Association, died June 14, from Bright's disease, after an illness of two years, aged 67.

George Hosmer Magness, M.D., Bellevue Hospital Medical College, New York, 1876, died at his home in White Plains, N. Y., aged 50. He was president of the Health Board, and a member of the Weschester County Medical Society.

William Irving, M.D., Trinity Medical College, Toronto, Ont., 1874, an old and highly respected practitioner of St. Mary's, Ont., died at his home in that place, June 19, from pneumonia following inflammatory rheumatism.

William Conrad Smith, M.D., University of Pennsylvania, Philadelphia, 1850, who had practiced at and around Linglestown, Pa., for more than half a century, died suddenly at his home in that place, June 16, aged 72.

William L. Nichol, M.D., University of Pennsylvania, Philadelphia, 1849, an old practitioner of Nashville, Tenn., and formerly surgeon in the United States Navy, died at his home in Nashville, June 23, aged 73.

Timothy Newell, M.D., Vermont Medical College, Woodstock, 1850, practitioner in Providence for nearly half a century, and a surgeon in the Civil War, died at his home in Providence, June 20, aged 81.

William J. Campbell, M.D., Harvard Medical School, Boston, 1900, house physician at the Worcester City Hospital, died June 14, aged 26, of smallpox contracted from a patient for whom he was caring.

Aaron Lewis, M.D., Indiana Medical College, La Porte, Ind., 1846, for many years a practitioner of Waukegan, Ill., died at the home of his daughter in Louisa, Va., June 24, aged 83.

Andrew F. Wright, M.D., Kentucky School of Medicine, Louisville, 1859, died at his home in Sherman, Texas, where he had practiced for twenty-five years, June 14, aged 76.

Benjamin F. Reynolds, M.D., Jefferson Medical College, Philadelphia, for many years a practitioner of Pittsburg, Pa., died at his home in Hulton, Pa., June 12, aged 67.

Westervelt Banta, M.D., Niagara University, Buffalo, N. Y., 1888, died at his home in Buffalo, N. Y., June 17, from cancer of the stomach, after an illness of two months.

Achbor J. Baker, M.D., University of Michigan, 1886, of Grafton, W. Va., was drowned, June 24, in an ineffectual attempt to save his 8-year-old son from drowning.

William H. Briggs, M.D., Geneva Medical College, Geneva, N. Y., 1844, for many years a practitioner of Rochester, N. Y., died at his home in that city, June 14, aged 79.

Van Buren Dixon, M.D., who was committed to Montevue Hospital for the Insane, at Frederick, Md., February, 1899, died there, June 8, from paralysis, aged 62.

Arthur J. Dresser, M.D., one of the physicians at the State Hospital at Tewkesbury, died at that place, June 11, from typhoid fever, after a long illness, aged 26.

George H. Preston, M.D., New York University, 1879, a practitioner of Kane, Pa., ever since his graduation, died at his home in that place, June 11, aged 45.

Edward L. Groess, M.D., University of Buffalo, 1893, of Buffalo, died at his home in Black Rock, June 19, from paralysis of the heart, aged 38.

Lee Wood, M.D., University of Tennessee, Nashville, 1890, of Abbeville, La., died at Warsaw, Ark., June 14, after a prolonged illness.

Alanson T. Smith, M.D., New York University, 1885, of Brooklyn, N. Y., died at his home in that place, June 17.

James M. Cole, M.D., a charter member of the Winona County (Minn.) Medical Society, died recently.

John Bryan, M.D., an old physician of Cincinnati, died at his home in that city, June 11, aged 75.

Societies.

Baltimore and Ohio Association of Railway Surgeons.—At the annual meeting of this Society, held in Chicago, May 31 and June 1, Dr. Thomas H. White, Connellsville, Pa., was elected president. The next meeting will be held in Atlantic City, N. J., in June, 1902.

Manchester (N. H.) Medical Association.—At the annual meeting of this Society, held June 14, Dr. James S. Brown was elected president; Dr. J. Franklin Robinson, vice-president; Dr. Arthur F. Wheat, secretary; Dr. William H. Pattee, treasurer, and Dr. Walter T. Crosby, pathologist.

Des Moines Valley (Iowa) Medical Association.—The thirtieth annual meeting of this Association was held at Ottumwa, June 20. Dr. France C. Roberts, Fort Madison, was elected president; Dr. Henry C. Eschbach, Albia, vice-president, and Dr. Murdock B. Bannister, Ottumwa, secretary-treasurer.

Dorchester (S. C.) Medical Association.—This Association was organized at St. George, Dorchester County, S. C., June 10, and elected the following officers: Dr. P. L. Horn, St. George, president; Dr. F. Julian Carroll, Summerville, vice-president; Dr. J. B. Johnson, secretary, and Dr. Perry M. Judy, St. George, treasurer.

Hennepin County (Minn.) Medical Society.—At the annual meeting of this Society, held at Minneapolis, June 17, Dr. Henry L. Staples was elected president; Dr. Frank C. Todd, vice-president; Dr. Arthur E. Benjamin, secretary; Dr. William H. Condit, treasurer, and Dr. George D. Head, librarian, all of Minneapolis.

Central District (Iowa) Medical Society.—At the meeting of this Society at Greenwood Park, Des Moines, June 18, Dr. Josiah D. McVay, Lake City, was elected president; Dr. John I. Hostetter, Colo, vice-president, and Dr. George H. Stanger, Boone, secretary-treasurer. The next meeting will be held at Boone in December.

Aberdeen District (S. Dak.) Medical Association.—The fourth quarterly meeting of this Society was held at Aberdeen, June 18. The following officers were elected: Dr. William E. Edwards, Bowdle, president; Dr. Frank Miller, Aberdeen, vice-president, and Dr. George E. Countryman, Aberdeen, secretary and treasurer.

West Chicago Medical Society.—This Society was organized June 18, and the following officers were elected: Dr. Emil D. St. Cyr, president; Dr. Oscar G. Wernicke, vice-president; Dr. George M. Silverberg, treasurer; Dr. Gustavus M. Blech, secretary, and Drs. Arthur M. Shabad, Frederick W. Henkel, Julius M. Abelio and S. Brownstein, executive council.

South Dakota Medical Society.—The annual meeting of this Society was held in Huron June 11 and 12. The following officers were elected: Dr. Cheney C. Gross, Yankton, president; Drs. John Owen Duguid, Springfield, and Byron A. Bobb, Mitchell, vice-presidents; Dr. James L. Stewart, Irene, secretary and treasurer, and Dr. Henry B. Scofield, Scotland, assistant secretary. The Society will meet next year in Scotland.

Alumnae Association of the Northwestern University Woman's Medical School.—The annual meeting of this Association was held at the college, June 20. The following officers were elected: Dr. Annie White Sage, president; Drs. Vira A. Brockway and Catherine Angell Warthern, vice-presidents; Dr. Eliza H. Root, secretary; Dr. Mary Gilruth McEwen, assistant secretary, and Dr. Mary C. Hollister, treasurer.

Alumni Association of the Medical College of the State of South Carolina.—The Association held its annual meeting at the close of the graduation exercises of the college and elected the following officers: Dr. Julius A. Mood, Sumter, president; Drs. Robert L. Brodie, of Charleston, W. D. Ferguson, of Laurens, P. Gourdrin DeSaussure, of Charleston, and O. A. Matthews, of Newberry, vice-presidents, and Dr. C. Bunting Colson, Charleston, secretary and treasurer.

Illinois Association of Military Surgeons.—The annual meeting of this Association was held in Chicago, June 18. Colonel Nicholas Senn, surgeon-general, and Lieutenant-Colonel Charles Adams were re-elected president and secretary, respectively, and Major Thomas J. Sullivan, surgeon Seventh Infantry, I. N. G., was elected vice-president to succeed Major Truman W. Miller, deceased. The Association will hold its next meeting at Moline in October.

American Orthopedic Association.—At the meeting of this Association, held at Niagara Falls, N. Y., May 11, 12 and 13, the following officers were elected: Dr. H. Augustus Wilson, Philadelphia, president; Drs. William J. Taylor and Gwilym G. Davis, Philadelphia, vice-presidents; Dr. John Ridlon, Chicago, secretary, and Dr. Elliott G. Brackett, Boston, treasurer. Philadelphia was chosen as the place for the next meeting in May, 1902.

Maine Medical Association.—The forty-ninth annual meeting of this Association was held in Portland, June 12, 13 and 14. The president, Dr. Edward H. Hill, Lewiston, in his address, considered at length the subject of tuberculosis. The election of officers resulted as follows: Dr. Frederic H. Gerrish, Portland, president, and Drs. Charles E. Philoon, Auburn, and J. M. Willis, Guilford, vice-presidents. The annual oration was delivered by Dr. Edward Reynolds, Boston, on "The Use of Gynecology by the General Practitioner."

Class of 1876 of the Department of Medicine of the University of Pennsylvania.—This body held its first annual banquet at the University Club, Philadelphia, June 11, and effected a permanent organization for the benefit of its alma mater. The following officers were elected: Dr. Charles A. Oliver, president; Dr. William H. Klapp, vice-president; Dr. Francis M. Perkins, secretary, and Dr. Benjamin F. Baer, treasurer, all of Philadelphia, with an executive committee of twelve which will meet at the call of the president.

North Missouri Medical Association.—This Association held its annual meeting at Monroe City, June 20 and 21. The officers for the ensuing year are as follows: Dr. S. M. Brown, Monroe City, president; Drs. W. S. Thompson, Armstrong, and W. G. Yates, Collis, vice-presidents; Dr. Robert Haley, Brookfield, treasurer; Dr. L. W. Dallas, Hunnewell, recording secretary, and Dr. William A. B. McNutt, Monroe City, corresponding secretary. The Association adjourned to meet at Macon City, June 19 and 20, 1902.

Arizona Medical Association.—The most successful meeting ever held by this body was convened in Phoenix on May 22. A large part of the time was used in reading and discussing papers upon the climatology of Arizona, with special reference to tuberculosis, and diseases of the kidneys and bladder. Seventy-six per cent. of the regular practitioners of Arizona are members of the Association. The next meeting is to be held in Tucson, May 21 and 22, 1902. The following officers were elected: Dr. H. W. Fenner, Tucson, president; Dr. H. H. Stone, Phoenix, O. E. Plath, Phoenix, and O. S. Boido, Tucson, vice-presidents; Dr. George M. Brockway, Florence, treasurer, and Dr. Charles H. Jones, Tempe, secretary.

Massachusetts Medical Society.—The 120th annual meeting of this Society was held in Boston, June 11, 12 and 13. The following officers were re-elected: Dr. Frank W. Draper, Boston, president; Dr. William W. Eaton, Danvers, vice-president; Dr. Edward M. Buckingham, Boston, treasurer; Dr. Charles W. Swan, Brookline, corresponding secretary; Dr. Francis W. Goss, Roxbury, recording secretary, and Dr. Edwin H. Brigham, Boston, librarian. Dr. David W. Cheever, president of the Boston Medical Library, presented its claims. On the new building there had been raised and expended $73,000, and there was a mortgage of $50,000. The library needed an endowment for new books, and in addition to a request for this, Dr. Cheever urged the fellows of the society to become associate members, to use the library and to support it.

Buffalo Academy of Medicine.—The annual meeting of the Academy was held June 11. The election of officers resulted as follows: Dr. Charles G. Stockton, president; Dr. Francis W. McGuire, secretary; Dr. Charles S. Jewett, treasurer, and Dr. Matthew D. Mann, trustee. The permanent funds now amount to more than $1300, and it is hoped that the Academy may some day own its building. In his address the retiring president, Dr. Marcell Hartwig, declared that free hospitals and dispensaries had nearly ruined private practice and that hospitals were often hostile to the medical profession. He also complained of persons of wealth patronizing hospitals instead of calling in their family physician. As a remedy he urged that physicians should amalgamate, and build and maintain their own hospitals so that they may be free to act and not be the tools of a lay board of trustees or managers.

Society of the Alumni of the Medical Department of the University of Pennsylvania.—At the annual meeting of this Society, June 11, a portrait of Prof. John Ashhurst, Jr., was presented by the class of 1901, and received by Dr. Frederick A. Packard on behalf of the Board of Trustees. It was announced that the Alumni medal had been awarded to Homer J. Rhode, of Kutztown, Pa. The following officers were elected: Dr. James Tyson, Philadelphia, president; Drs. Horace Y. Evans, Charles K. Mills, Samuel D. Risley and Frederick A. Packard, of Philadelphia, William W. Johnston, of Washington, D. C., Howard Kelly, of Baltimore, Grover W. Wende, of Buffalo, N. Y., and Edward Jackson, of Denver, Colo., vice-presidents; Dr. Roland Curtin, Philadelphia, historian, and Dr. Wm. J. Wadsworth Philadelphia, secretary and treasurer.

Association of American Medical Editors.—The annual meeting of this Association was held at St. Paul, June 3, 4 and 5. At the instance of Dr. Foster, a committee, consisting of Drs. George H. Simmons, editor of THE JOURNAL, George M. Gould, of *American Medicine*, and Burnside Foster, of the *St. Paul Medical Journal*, was appointed to amend the constitution and by-laws of the Association by adding certain rules concerning the nature of the advertising to be admitted to the pages of the journals in affiliation with the Association. These rules are to be binding on all members, the committee also being advised to suggest such revision of the constitution and by-laws as may be deemed advisable. The annual dinner of the Asso-

ciation was held June 3, President Stone acting as toastmaster. The officers for the ensuing year are: Dr. Alexander J. Stone, St. Paul, president; Dr. Burnside Foster, St. Paul, vice-president, and Dr. O. F. Ball, St. Louis, secretary and treasurer.

THE AMERICAN PROCTOLOGIC SOCIETY.

Third Annual Meeting, held at St. Paul, Minn., June 4 and 5, 1901.

President Dr. James P. Tuttle, New York City, in the chair.

Malignant Tumors of the Rectum.

The president, DR JAMES P. TUTTLE, New York City, delivered the Annual Address on the above subject. He divided malignant tumors into four classes: Connective, epithelial, muscular, and irregular tissue growths.

He described 43 cases from his own practice, and from the literature of the subject; of these 29 of the melanotic type and 14 of the non-melanotic. Sarcomas occur in the rectum as round or elliptical irregular deposits beneath the mucous membrane, sometimes resembling a hypertrophied tonsil. They rarely, if ever, assume the smooth plaque-like form seen in carcinoma, the surface being always rough, unequal, "muriform," and the mucous membrane being movable over the growth in its earlier stages, are conditions which distinguish them from carcinoma. They originate in the submucosa, may appear as sessile tumors, and eventually develop a distinctly polypoid shape. They may also appear as a general fibrous thickening of the wall and be mistaken for simple inflammatory stricture. The mucous membrane covering sarcomas is comparatively normal, although if the tumor becomes very large, the membrane may become congested, edematous, or ulcerated, and even adherent to the growth through inflammatory processes. Sarcomas in the rectum are either single or multiple, and vary in size from a hazel nut to a good-sized orange. Sarcomas of the rectum present a variety of colors, generally that of the normal mucous membrane, although sometimes they are dark red, grayish-black, bright red, pale-yeliowish pink, or as black gangrenous masses. Often in the multiple form, the different tumors will present varying appearance. Sarcomas may occur at any portion of the rectum or sigmoid, but the majority are situated low down near the anal margin. Sarcomas differ from carcinomas by their rapid growth. Unlike sarcomas in other portions of the body, these sarcomas are said to have a distinct tendency toward ganglionic infection. Metastasis is one of the chief characteristics of sarcomas of the rectum. If the growth be primary, all possibility of metastatic deposit should be eliminated, or else the operation will be of no avail. A complete résumé of the histology was given under the following heads: Round or globe-cell sarcomas, spindle or fusiform, giant cell, alveolar, and mixed. Melanosis does not alter the type of the tumor or change the character of its component parts. It takes place in all types and may involve but one part of a tumor, or only one or two tumors where they are present in multiple form. Sarcomas of the intestine always develop from the submucosa, and ordinarily affect the mucous membrane only after pressure, tension, and ulceration, through friction and infection by fecal masses. The causes and influences which bring about the production of sarcoma are as little known as those of carcinoma. Age cannot be proved to have any direct influence, although the disease occurs more often late in life, and there is apparently no relationship between the sexes and this disease. Symptoms are at first very vague. There may be a sense of fullness, or the feeling of the presence of a foreign body, or the first symptom may be bleeding and discharge of mucus. The protrusion of sarcomatous tumors is more frequent than in case of carcinoma, but less so than in other forms of rectal neoplasms. There is no odor peculiar to sarcoma. After ulceration has occurred and there is a production of pus, the odor changes to that of decomposing tissue, but never assumes that peculiar characteristic odor which is found in carcinoma of the rectum. If the sarcoma is low down and involves the sphincter, producing traction and pressure, the patient may suffer considerable pain. But if it is high up and of an infiltrating form the patient may go to the very door of death without any knowledge of its existence. The state of the bowels in sarcoma of the rectum varies according to the type of the tumor. There may be either constipation or diarrhea. The latter may be caused by the mobility of the growth and its location near the margin of the anus. Constipation may be caused upon mechanical grounds. Flatulence, indigestion, and loss of appetite are associated with sarcoma of the rectum as they are with all other neoplasms of this organ. Cachexia is not well marked. Reflex digestive disturbances are noted. Decrease in strength, loss of flesh, swelling of the feet and abdomen rapidly succeed one another, when the sarcoma is once well developed. Dysuria is frequently present. The lungs and pleura may become affected.

The diagnosis of this condition lies between carcinoma, and villous tumor. The tumor is less sessile than carcinoma, and less pedunculated than adenoma. It is more firm than adenoma and has a less degree of induration than carcinoma. In its attachment, its roots do not spread out, producing that general infiltration of the mucous membrane that obtains in carcinoma. Its attachment is very abrupt. To the touch it is more undulating and irregular than carcinoma, but has not the granular and dendritic divisions which one finds in villous tumor and in adenoma. The latter occurs largely in children whereas sarcoma is a disease of middle or advanced life. When it is a question between sarcoma and multiple adenoma, the multiplicity of the growths, the excessive diarrhea, together with the comparatively fair condition of the patient's health, may be mentioned upon the side of adenoma. Between sarcoma and carcinoma, the distinct odor of the latter is enough to make the decision positive. In the early stages of the disease, the fact that the mucous membrane moves easily over the growth distinguishes it almost positively from carcinoma. The final test depends upon the microscopic examination of a section from the real substance of the tumor itself. Personally the essayist was opposed to making an incision to obtain the section unless the case was operable and the patient consented to an operation if the microscopic examination showed a necessity for one.

The treatment of the disease consists in the radical removal of the growth. A ligature to pedunculated sarcomas ought never to be considered. If the growth is single and in the wall of the rectum a posterior proctotomy may be done. If it is diffuse, involving the entire circumference of the rectum, total excision of the organ is the only recourse. While there is some evidence of the value of the serum therapy in the treatment of the sarcomas elsewhere, the advocates of this method lend no encouragement by their results in the treatment of this condition in the rectum. Artificial ani may give great relief in carcinoma, but it neither relieves nor checks the progress of sarcoma.

Disease of the Sigmoid.

DR. G. B. EVANS, Dayton, Ohio, discussed the question as to whether or not the rectum was the receptacle for feces, or whether the latter is arrested, detained, and accumulated in the sigmoid flexure of the colon. The reader inclined to believe that the rectum was the receptacle. From its situation and anatomical relations, the reader was convinced that the sigmoid is oftener the seat of obscure abdominal diseases than has generally been suspected. In appendicitis there is often reflected pain over the whole abdomen, often in the left iliac region over the sigmoid. Now if this is true, the converse is also true. This point was illustrated by reference to a patient who had a distinct history of appendicitis. The condition was promptly relieved by flushing the sigmoid and colon with large quantities of hot boric solution. This treatment was advised in all cases of supposed appendicitis. It can do no harm and might do good.

Recto-colitis.

DR. WILLIAM M. BEACH, Pittsburg, Pa., described recto-colitis as a condition of the rectum and colon that generates functional derangements consequent upon varying degrees of inflammation of its mucous membrane. Omitting malignant diseases, recto colitis was considered under the following stages:

Congestion, atrophic catarrh, hypertrophic catarrh, and ulceration. Simple congestion due to engorged blood-vessels may be ephemeral and express itself locally in the form of dysentery and tenesmus and the excretion of an enormous quantity of mucus. This condition if allowed to continue becomes chronic, developing usually the hypertrophic catarrh; epithelium is shed, valves swollen and thickened, narrowing of rectal straits, diarrhea alternating with constipation. Atrophic catarrh is usually accompanied by the constipated habit; dry hard stools, and minute anal fissures. Secretions are insufficient on account of gland impairment. Atrophic recto-colitis is rare. The ulcer is the culmination of the inflammatory process, and in the experience of the reader rarely occurs above the sigmoid flexure.

Anal Pockets.

DR. LOUIS J. KROUSE, Cincinnati, first entered into a very exhaustive study of the so-called anal pockets in which he gave the results of his own observations and those of other investigators. He discovered by his researches that these pockets were present in the rectums of the living to the extent of 80 per cent., but that they were entirely absent in the dead. In conclusion he said: That the so-called anal pockets may be the cause of certain diseases located in the lower outlet of the bowel, I cannot gainsay; but I believe that they are most likely the frequent predisposing cause of an irritable ulcer of the anus. If we examine the rectum in the quiescent state, when the bowels are empty, we find that the anus is closed; the anal valve and its corresponding sac are absent. But when the bowels move, the anal canal is opened and the anal valve becomes prominent, the same as would occur had an anal speculum been introduced and opened. Should a hardened fecal mass pass through the anal outlet, with a prominent pseudo-valve protruding, then this valve would most likely be caught by the moving mass and possibly be torn, producing what might be termed an irritable ulcer of the anus.

The Treatment of Rectal Prolapse.

DR. J. RAWSON PENNINGTON, of Chicago, believes that some of the most important factors in the production of rectal prolapse are to be found within the intestinal canal and considers the plica transversalis recti et sigmonideæ as one of the most, if not the most, important causative factors. He continued by saying that various procedures have been devised for the treatment of this malady, but to be successful the operation selected must be determined by the variety and specific conditions of the prolapse, otherwise it will be a failure. Of these procedures he mentioned, 1, those having for their object the production of adhesive inflammation between the coats of the intestinal walls; 2, narrowing the anal canal; 3, amputation; 4, reposition and bony fixation; 5, reposition and intra-abdominal fixation (colopexy or sigmoidopexy); 6, Thuré Brandt massage; 7, electricity; 8, ligature.

New Method for the Removal of Hemorrhoids Under Local Anesthesia.

DR. THOMAS CHARLES MARTIN, Cleveland, stated that non-malignant anal growths could be removed painlessly without resort to general anesthesia by means of a technique which he described, provided it be performed by the trained hands of an operator who thoroughly understands the principles of infiltration anesthesia, and who, furthermore, has been sufficiently persevering to master the difficulties encountered in the application of those principles to this operation.

The following officers were elected to serve during the coming year: Dr. Thomas Charles Martin, Cleveland, president; Dr. George J. Cook, Indianapolis, vice-president; Dr. William M. Beach, Pittsburg, secretary-treasurer, and Drs. Joseph M. Mathews, Louisville, Ky., James P. Tuttle, New York City, and J. Rawson Pennington, Chicago, executive committee. Prof. Dr. Sonnenberg, Berlin, was elected to honorary membership on motion of Dr. William M. Beach, Pittsburg. The Society will meet at Saratoga, N. Y., in June, 1902.

Sun Baths for Chronic Eczema.—Winternitz reports the cure of a number of cases of chronic eczema with sun baths, the chemical rays arrested by red clothing.

PHILADELPHIA PATHOLOGICAL SOCIETY.

President, Dr. F. A. Packard, in the Chair.

Some Unusual Types of the Tubercle Bacillus.

DR. M. P. RAVENEL made some remarks on unusual types of the tubercle bacillus, to show the variability of this organism when grown upon different culture media. One of the growths was very greasy in appearance. In this specimen staining was very difficult. The specimen was derived from a goat suffering with the disease. If, as some contend, the pathogenicity depends upon the amount of fat contained, this special culture should be highly virulent, which did not seem the case. In other cultures of this micro-organism the cultures appeared greenish or blackish. In later instances the specimens were obtained from a child suffering with tubercular peritonitis.

DR. A. C. ABBOTT spoke of the work of Dr. Trudeau, who had also referred to certain peculiarities exhibited by the tubercle bacillus. In regard to the cultures presented he thought they looked like mould. He was under the impression that the work done by the speaker not only demonstrated the variability of the tubercle bacillus, but also its different micro-chemic reactions. It might appear that certain cultures of this micro-organism in the lower animals were pathogenic, while others were not so. The different characteristics of this micro-organism might be due to a difference in their environment.

Variola.

DR. W. M. WELCH and JAY F. SCHAMBERG presented specimens from a case of variola. The patient had been admitted to the Municipal Hospital on May 5, and was 28 years of age. He had never been vaccinated. When admitted the disease had advanced to the 5th day of the eruption. Death had occurred on the 12th day. The specimen of affected skin had been removed from the upper surface of the thigh and pubes. It vividly showed the papules and umbilicated vesicles present in this condition. At the autopsy the stomach had been found intensely congested, almost hemorrhagic, the veins being prominent, while the esophagus was quite pale, although a few minute ulcerated spots were found. Cultures of the heart blood were made and showed numerous streptococci.

The Increase of Connective Tissue in the Lung in Chronic Passive Congestion.

DR. R. M. PEARCE referred to the various changes which had been noted in the parenchyma and interstitial tissue. He had made certain investigations using the Weigert stain, resorcin, fuchsin, sesquichlorid of iron, and passing through alcohol, and xylol. Congo red, and eosin and carmin were also found of value. He had studied the bronchi, pleura, and septa, and found that the elastica diminished gradually until it reached the terminal bronchioles. At the vestibule the elastica was found collected in distinct nobs, or nodules, where it was thickened and stained irregularly. In some sections the tissue seemed to be made up of blood vessels and elastica. The greatest increase was in the bronchi. The increase in the blood-vessel walls was in the adventitia.

DR. SIMON FLEXNER thought that the results obtained demonstrated the improvements which had recently been made in micro-chemic technic. The increased rigidity of the lungs in chronic congestion might be explained from this increased amount of elastica present.

Probable Primary Intestinal Tuberculosis in an Adult with Metastases.

DR. F. A. PACKARD, in detailing the clinical history, stated that the man had been a laborer, 30 years of age, who had died at the Pennsylvania Hospital May 17. He had been ill for several days with vomiting and diarrhea. The temperature had been 101, pulse 72. Nystagmus was also present. Plantar reflexes were increased, and Kernig's sign was marked. Lumbar puncture had been done, but no fluid obtained. No eruption had been present. It was thought that meningitis was present in this case. The specimens were exhibited to show that the primary focus might probably have been in the intestine.

DR. SIMON FLEXNER spoke of the results found at autopsy. The left lung was firmly adherent to the chest wall, and adhe-

sions were also present between the lung and pericardium. In the lung gray tubercles were found. The bronchial lymph glands were enlarged and contained caseous material. Sections of the lung were pale, and miliary tubercles were present. There were no cavities present. The intestines were distended, and along its coats miliary tubercles were found. Tubercles were found in the pelvis. The blood vessels of the bladder were injected. The vermiform appendix was enlarged, the serous membrane injected and covered with miliary tubercles. The mesenteric glands were enlarged and caseous. The adrenals were caseous, as were the retroperitoneal glands. The kidneys showed tubercles. A very large tubercle was found at the base of the brain, and tubercles were present on the ependyme. Tubercles were found microscopically in the meninges at the base of the brain. In this locality the blood vessels showed proliferation of the endothelium.

DR. W. M. COPLIN referred to a form of intestinal tuberculosis mentioned by French writers, and called the hypertrophic form. In certain of these cases, an excision had been done, resulting in a cure. They were of a chronic nature, and the growths resembled that of cancer with ulceration and cicatrization.

Teratoma of the Testicle.

DR. W. F. HENDRICKSON read a paper and presented specimens of teratoma of the testicle. The specimen had been removed from a man 25 years of age, and had involved the testicle and a portion of the cord. Two excrescences had been found externally, and adjacent to one, yellowish spots had been present. The testicle was entirely destroyed and replaced by the tumor mass composed of grayish or yellowish-white material. Microscopically the tumor showed a perivascular growth having a peculiar arrangement. About the smaller blood vessels a few giant cells were found, while other cells were of an epithelioid nature. A few giant cells were present near areas of cartilaginous tissue. In certain respects it resembled adrenal material.

Tuberculosis of the Heart.

DRS. W. S. WADSWORTH and W. F. HENDRICKSON presented a card specimen. In this case death had been sudden. At the autopsy cavities were found in the lungs, and the pericardium contained blood-stained serum. The right auricle and ventricle seemed normal. In the left ventricle were found numerous irregular grayish or reddish nodules varying in size from a pinpoint to several millimeters. These growths were also found on the intra-ventricular septum. Microscopically they were identified as miliary tubercles. No tubercle bacilli were present in any of the nodules examined.

NINTH GERMAN CONGRESS OF GYNECOLOGY.

Held at Giessen, May 29-31.

LOEHLEIN in his opening address remarked that atmocausis, angiotripsy and serum-therapy have not yet fulfilled anticipations, and that further experiences are necessary with each.

Carcinoma Uteri.

W. A. FREUND delivered the principal address on the above subject. He was able to report only two cases permanently cured in his twenty-three years of experience: one operated on for recurrence after amputation of the portio, the other for carcinoma of the cervix with a nodule in the uterus. Both patients are entirely healthy, seventeen and twenty-three years after total extirpation. He urges that the abdominal route should not be reserved exclusively for the severest cases, as on this account, it is impossible to compare the statistics of abdominal and vaginal operations. Winter claims that the only criterion of the superiority of an operation is the number of permanent cures achieved by it, always bearing in mind the co-efficient of operability. He learned, by inquiry in the various clinics of Germany, that the average mortality after abdominal extirpation with removal of the larger portion of the parametrium and the glands, is 24.6 per cent., with a record of 41.6 per cent. recurrences during the first year. Consequently he believes that the vaginal route is the operation of the future. He makes a Schuchardt vaginoperineal incision in every case. This incision starts from the perineum, is carried across and far back of the rectum, through the entire side of the vaginal wall. It allows ample access to the parametrium. Staude incises on both sides. Olshausen reports 38 per cent. permanent recoveries—that is, the patients cured for more than five years by vaginal extirpation.

Eclampsia.

The second day was devoted to this subject. None of the various theories in regard to the etiology of eclampsia can be definitely accepted, Fehling observed. Schmoral stated that he had found a characteristic anatomic picture at the autopsies of 73 eclamptic women. Schuchardt considers the anemic and hemorrhagic necrosis of the liver highly characteristic. Dienst reported that a circulus vitiosus evidently exists between mother and fetus; the same alterations in the organs are noted in each. He removed a fragment of the liver from an animal with young. It was seized with convulsions soon after. The young were born dead, and the typical eclamptic alterations, especially the liver necrosis, were found in them likewise. Strassmann stated that the experiences at the Berlin Charité indicate that compression of the ureters has some share in the production of eclampsia. The severity of the cases seems to be decreasing of late. Large cities are most affected; social conditions and even the weather, seem to have an influence on its prevalence.

Winternitz stated that he had found the streptococcus in the uterus in 63 per cent. of all his cases of puerperal fever; the staphylococcus in 6; bonococci in 6.3, and the colon bacillus in 3.1 per cent. Leopold exhibited cultures of blastomycetes originally derived from tissue taken from the neighborhood of a carcinoma. He announced that he was able to produce sarcomata as well as carcinomata in animals inoculated, and suggests that the former may be a benign form of the latter. He exhibited a rat with multiple tumors from inoculation of his cultures. Fraenkel reported that the ovary not only produces the ovum, but has a direct influence on its insertion. Hallan also confirmed the fact of the internal secretion of the ovary, stating that he had restored menstruation in monkeys after extirpation of the ovaries, by transplanting an ovary, and that the menstruation was again arrested if the transplanted organ was removed.

Amann described a new extraperitoneal method of abdominal extirpation of the uterus. He remarked that he had observed two cases in which the glands in the posterior wall of the abdomen became carcinomatous more than five years after total vaginal extirpation. His mortality with the latter has been 4 per cent. in 175 operations. By his new method it is possible to remove extensive portions of the parametrium, expose the ureters, bladder-wall and vagina as freely as desired, and yet not open the peritoneum for more than a few minutes. He has been very much pleased with the results in fourteen cases; his first was operated on in April, 1899. The ureters are exposed through a lateral incision, detached, and the uterine or hypogastric artery ligated. The peritoneum is not opened until this is done. Then it is incised, the uterus extirpated through it, and the peritoneal cavity closed again at once by suturing the vesical peritoneum to the peritoneum of the posterior pelvic wall. The parametrium is then exposed and removed as desired, with the glands, terminating with gauze drains in the vagina and abdominal wound. This method allows easy access to the point where the uterine artery and the ureter cross, allowing the implantation of the latter in the bladder if necessary.

The next congress will be held at Wuerzburg, in 1903, with Hofmeier as president. The subjects announced for discussion are "Extra-uterine Pregnancy," and "Plastic Operations with Special Regard to Their Permanent Results."

ONTARIO MEDICAL ASSOCIATION.

The Twenty-first Annual Meeting, held at Toronto, June 19 and 20, 1901.

The president, Dr. Angus McKinnon of Guelph, in the chair.

Three Recent Gall-Stone Cases.

DR. WILLIAM OLDRIGHT, of Toronto, said these cases had occurred recently in his practice. They present features of interest to the profession. The first case occurred in a woman about 55 years of age. The late Dr. Little had seen the patient and had endeavored to obtain purgation, without effect. Powerful cathartics were unavailing. About nine months previously she had a similar attack, but Dr. Oldright had heard nothing about it until this attack. The symptoms were somewhat elevated temperature, about 100 to 101, constant vomiting, obstruction, and intense pain. He supplemented Dr. Little's catharsis, but without any effect. On examination, he could map out a distinct tumor, and told her that she had a distended gall-bladder; advised her to go into the hospital, which she did that night. She was operated on in the afternoon, and removed some gall-stones, and endeavored to establish patency of the duct. He could feel no stones left behind, but there was some stenosis of the duct. There was a great deal of inflammatory action in this case. The gall-bladder was stitched into the abdominal wall and drainage established in the usual method; bile flowed freely. Patient made a good recovery. The second case was one in consultation with Dr. McLean, of Woodbridge. She was 65 years old. The prognosis was certainly death without operation. At the operation he could not locate the gall-bladder. He came to the conclusion that it was not a case for further interference. Within twenty-four hours she succumbed to the shock and probably to some hemorrhage. There was no doubt after passing the finger in, that it was malignant. If this woman had been operated on some years before, Dr. Oldright thought that malignancy would not have occurred, and her life would have been saved. The third case occurred in a woman 40 years of age. Here was a case in which there had been gall-stone symptoms, obstruction, for about eighteen months. She consented to an operation. The obstruction was in the cystic duct. He opened the gall-bladder and took out the stones. The operation occupied about forty minutes. The patient made an uneventful recovery, and left the hospital thirteen days after the operation.

Excision of Upper Jaw for Sarcoma.

DR. HERBERT A. BRUCE, of Toronto, presented this paper, whilst Dr. G. Silverthorne exhibited the specimen. Dr. Bruce also presented the patient, a woman, 54 years of age, from whom he had removed the upper jaw for sarcoma. During the last week of January of this year she felt for the first time a slight swelling over the alveolus of the left jaw, which she thought to be a gum boil. She consulted Dr. Bowles at the end of March, and Dr. Bruce saw her about the middle of April, that is, less than three months after the first symptoms. He operated upon her on April 29, exactly three months after the first symptom. On examination, he found a very hard swelling just behind the second bicuspid tooth and extending backwards to the full extent of the jaw. Internally, it had not extended to the middle line, but bulged externally to the extent of half an inch beyond the line of the teeth. It extended backwards towards the antrum, but the latter did not seem to be implicated externally. The growth in the roof of the mouth was covered by a mucous membrane. On looking into the nose, a polypoid mass was seen; and the patient had difficulty in breathing through the left nostril. The cheek on the affected side was slightly more prominent, and it moved freely over the growth. A small portion of the growth was removed under cocain, and Dr. Silverthorne reported to Dr. Bruce that it was sarcoma. The patient left the hospital on May 18 and made an uninterrupted recovery.

Dr. Silverthorne presented the specimen to the members of the Association. It was the size of a large-sized orange, containing spindle cells with a cartilaginous basis.

Ectopic Gestation.

DR. R. W. GARRATT, of Kingston, said the subject is one of vital importance to every practitioner, for at any time he might be called upon to differentiate the condition from others from which it might be confounded. The responsibility of a life was in his hands and demanded accurate diagnosis, medical acumen and judgment and ability to conduct the case to a favorable termination. He entered at considerable length as to the causation and earlier changes consequent upon ectopic gestation, and stated, that every physician is expected to make a correct diagnosis of tubal pregnancy on the occurrence of rupture; and in a fairly large proportion of cases, to make a diagnosis before the occurrence of rupture.

Theoretically, the arrest of a fructified ovum may occur first in the ovary; second, in the abdominal cavity, between the ovary and tube; third, within the tube, and fourth, between the tube and the uterus. He would direct the attention of his audience to but one kind only—arrest within the tube, or tubal pregnancy, as all other varieties are but mere developments of this kind, owing to secondary invasion of the Fallopian tube.

DR. J. F. W. ROSS thought that we ought to be able to diagnose these cases before rupture had taken place. He referred to the pain that is indefinite, not severe; not acute, but a feeling as if something were wrong. He referred to several cases recently seen in practice.

Dr. Powell referred to a case where Dr. Ross had diagnosed these conditions before rupture had occurred.

President's Address.

DR. ANGUS MCKINNON considered that it was a great honor to be elected president of this, the largest and most influential medical association in the Dominion of Canada. Having referred to the success of the meeting so far, he proceeded to contrast the state of medicine at the beginning of the last century with that of the present, and compared the last advantages we to-day possess over those of one hundred years ago. He deplored the growth in the employment of new, proprietary remedies, and thought that harm was being done to the medical profession by manufacturing firms making up pills for neuralgia, for malaria, etc. He considered that the literature and drugs sent out to medical men by these manufacturing houses had become an intolerable nuisance. The electric-belt man, the "Christian scientist," the advertising cancer-curer, the osteopath, and many other such like fakes, which hang on to the skirts of medicine [illegible] scored most unmercifully, and regretted that the public press, both secular and religious, opened their columns freely to these fulsome, untruthful, and sometimes immoral advertisements—because they pay well. There was great danger to the public in permitting "Christian scientists," the "pray-for-hire-healers," and the "Dowieites," impudently undertaking to cure infectious diseases such as diphtheria, scarlet fever, and smallpox, diseases which they are unable to recognize; and we think that we have come to a point where toleration and forbearance become criminal. The 2500 medical men in Ontario should have influence enough to obtain from the legislature an amendment to the medical act that will put an end to this trifling with human life. He directed attention to the delay that occurs in securing admission to the asylums for people, the subject of acute mania, and thought that it was high time the necessary steps in this department in the practice of medicine should be simplified.

Vaccinal Protection Against Smallpox.

DR. P. H. BRYCE, of Toronto, the Secretary of the Provincial Board of Health, presented this paper. In the introduction he expressed the belief that, although the practice of vaccination against smallpox has existed for a century, there never was a time since it was formally accepted by the profession, when there was so much expressed skepticism on the part of the laity with regard to its protective qualities, and never a time when the profession has been so indifferent as to impressing the necessity of its proper performance upon the public. In Ontario, between 1898 and 1899, there were but 22 recorded deaths from the disease. He made special reference to the art of vaccination and the quality of the lymph, and thought five separate insertions should be made in each case. The quality of the lymph was very important. He thought that a medical man going out from college did not receive sufficient practical instruction on this most important subject.

DR. I. H. CAMERON discussed Dr. Bryce's paper and stated, as a matter of fact, he had no hesitation whatever in seeing a case of smallpox himself, nor would he object to any member of his family seeing it, if he knew that they had sufficient protection in vaccination. He warned the profession against laxity in dealing with this most important subject.

DR. HARRISON, of Selkirk, stated that he had had considerable experience with smallpox, and on account of that expe-

rience he entered a vigorous protest against the prevailing carelessness in insisting on vaccination and re-vaccination in the laity as well as the profession.

Empyema.

DR. FERGUSON, of London, said that the treatment of this condition was essentially surgical, and that the medical aspects of the disease were limited to a consideration of its pathogenesis and prophylaxis. He considered that the conditions of non-purulent or primary effusion, indispensable to an understanding of the pathogenesis of empyema. He gave a description of the pleura and discussed the bacteriological aspect of purulent pleurisy, which he divided into four classes; 1, those due to pneumococci; 2, those due to streptococci (and staphylococci); 3, those to the bacilli of tuberculosis; and 4, those caused by saprogenic organisms. In nine cases, extending over eleven years in his practice, three were diagnosed tubercular, three meta-pneumonic, two due to the streptococci, and one undetermined. The prognosis varies with the microorganism present, the pneumococci being the most benign. It is the only variety of purulent empyemia that may possibly yield to treatment by mere aspiration, especially in children. Tubercular empyema is usually mixed infection. The prognosis here will depend upon the general condition of the patient, and the character of the mixed infection. We, therefore, see the importance of a bacteriological examination. As in any other debilitating disease, supporting and tonic treatment is essential. With the advent of pus, surgical means must be adopted.

DR. J. L. TURNBULL, of Goderich, said that when the presence of pus is determined it should be evacuated at once, as there is always the danger of the abscess bursting into or through the chest wall, or even through the diaphragm, and producing peritonitis. Aspiration need not be described; remember not to remove the fluid too rapidly. In this, as in an ordinary abscess, it is not necessary to open at the most dependent point. The preferable way, and the one which Dr. Turnbull always uses when a diagnosis of pus is made, is to remove a portion of a rib; an inch and a half may be cut out, preferably with the saw, under strict antiseptic precaution. Dr. Turnbull advises washing out every day when pus is offensive; and drainage tube gradually shortened until it can be removed altogether. Where a cavity and sinus remains after this operation, the sinus may become closed and a second empyema established. This requires an Estlander's operation, and one of the best ways is to carefully locate size and boundaries of cavity with a probe, and after dissecting up a flap of skin to be sure to remove enough bone. The hard fibrous tissue beneath the ribs, which is always present in quantity there, must be thoroughly removed. Dr. Turnbull advises mopping out with pure carbolic acid, then with alcohol, to prevent poisoning, and then with sterilized water, the part being carefully dried. He puts a drainage tube in the most dependent part.

Open Treatment of Disease.

DR. GEORGE H. CARVETH, of Toronto, described his method of treating different forms of disease: 1, in the house with wide-open windows; 2, in beds on the veranda; 3, in beds under tents on the lawn. At first he experienced some difficulty in getting his patients to consent to be treated in this manner, but after they had become habituated to life in the open air, they returned in-doors reluctantly. Some of the cases that he has treated in this way are iritis, cases of fracture, cases of the radical cure of hernia, rheumatoid arthritis, tubercular disease of the spine, typhoid fever, and a case of hysterectomy. His address was illustrated by lantern slide projections on the canvass, which proved very interesting to the members of the association.

Gastric Ulcer.

DR. R. D. RUDOLF, of Toronto, gave a short historical sketch of the chief literature of the subject, and said during the last 30 years only one important symptom had been added to those mentioned by previous writers: the very common occurrence of hyperchlorhydria. Avoiding the consideration of the well-known points on the subject, he propounded five questions in connection with gastric ulcer which seemed to him to specially merit discussion: 1, is there any relation between gastric ulcer and cancer? Trosseau believed that an actual antagonism existed between the two conditions, while Bebert considered that 9 per cent. of all gastric cancers so arose, and Rosenheim states that 5 to 6 per cent. of all gastric ulcers became carcinomatous. Clinically, the speaker had never seen a case of simple ulcer end in cancer, nor had he seen a case of cancer preceded by ulcer, although such cases undoubtedly occasionally occurred.

DR. HENRY HOWITT, of Guelph, first took up the procedures for dealing with the ulcer or its results, in which perforation is not a factor. In all the operative procedures it was essential to prevent infection of the wound; stomach should be thoroughly washed with aseptic water, by means of siphon tube, immediately before the anesthetic is administered. It is not necessary to make the abdominal incision extensive, the length of the incision would depend upon the amount of contraction, and it is sutured in such a manner that when closed the line of union is at right angles to the original incision. This gives excellent results when properly done. Adhesions render this ideal operation impracticable. The first successful operation in Canada was performed in Toronto, in 1894, by Dr. Atherton. Up to last September in the neighborhood of 300 operations were reported, with a mortality of a little over 45 per cent. Dr. Howitt then referred to cases in his own practice.

With regard to the treatment, Dr. Howitt said that as soon as we are satisfied that perforation has taken place, referring to acute cases, he believes it is good practice to give morphia hypodermically; and it further lessens the amount of the anesthetic in the opinion of many. Success largely depends on the shortness of time before operation; delay is dangerous. It is Dr. Howitt's practice to eviscerate the bowels; one or more small incisions in the prominent coils soon overcomes the distention, and each one is closed before another is made. Attention is now turned to the stomach and the part brought into the wound. The ulcer is incised and opening closed with two or three layers of sutures. When the trouble is in the posterior wall it may be impossible to excise it, in which case, it can be generally inverted and closed by layers of sutures. The abdominal cavity should be thoroughly flushed with a stream of saline solution. When drainage is necessary, the tubes or gauze should not be introduced through a large wound. The object should be to have primary union to take place in the incision.

Resolution of regret for non-payment of the annual $2.00 fee of the Ontario Medical Council was introduced by Dr. Ferguson, of London, seconded by Dr. Gibson, of Belleville, that some members of the profession in the province had refused payment of this annual fee.

This Association regards the imposition of this fee as most reasonable, payment of which should meet with a cheerful response on the part of every member of the profession. This was carried unanimously amid much applause, and without a dissenting voice.

Dr. Wishart, Toronto, chairman of the special committee to draw up a resolution on vaccination, presented the following:

Resolved, That the Ontario Medical Association desires hereby to reassert the opinion of the medical profession of this province.

1. That the principles of Jennerian vaccination against smallpox, which have been now attested by the experience of more than a century, are scientifically correct.

2. That in order to carry out the protection through vaccination against smallpox it is necessary that the lymph used in the operation be of normal quality, and that this can be shown only by a proper amount of systemic reaction to the vaccine, as determined by the character of the vesicles, and that the absence of a normal reaction, as shown by the presence of vesicles, is no positive evidence of the immunity of the person either against vaccinia or smallpox.

3. That this Association emphasizes the urgent necessity that the searification of the skin be sufficiently extensive to secure such reaction, and to this end recommend that from three to five insertions each of a quarter of an inch square be made in each vaccination.

This was carried.

Medical Defense Union.

On motion of Dr. J. F. W. Ross, seconded by Dr. A. Primrose, a committee was appointed to inquire into this matter, to report at the next meeting of the Association in 1902.

The following officers were elected: President, Dr. N. A. Powell, Toronto; first vice-president, Dr. R. Ferguson, London; second vice-president, Dr. R. W. Garrett, Kingston; third vice-president, L. C. Prevost, Ottawa; fourth vice-president, R. L. Turnbull, Goderich; general secretary, Harold C. Parson, Toronto; assistant, Dr. George Elliott, Toronto;; treasurer, Dr. A. R. Gordon, Toronto.

Miscellany.

Military Precautions Against Yellow Fever in Cuba.

The military orders recently issued for the protection of the garrisons in Cuba from yellow fever differ widely from those in force heretofore. Formerly when a case of this disease was discovered in a command the patient was immediately isolated or sent to a yellow fever hospital; the barrack-room from which he was taken was temporarily vacated for a thorough cleansing and disinfection and quarantine was instituted against the locality from which the infection was supposed to have been imported. New cases occurring within five days were regarded as due, like the first, to imported infection, and cleansing and disinfection were again resorted to; but new cases occurring after the lapse of five days led to the opinion that the barracks had become infected and that a dangerous local outbreak of the disease would follow unless checked by disinfection and immediate removal to a new camp site, with a second change of camp site if needful to shake off the infection.

Now, however, the measures enjoined by the military authorities have in view the prevention of the dissemination of the yellow fever infection by mosquitoes. Well men are to be protected from the bites of infected mosquitoes and patients suffering from the fever are to be protected that uninfected mosquitoes may not become infected. Disinfection of rooms, clothing, bedding, etc., is declared unnecessary except in so far as it aims to destroy infected insects that may be present. The following circular was issued April 27, 1901, from headquarters, Department of Cuba, General Leonard Wood, commanding. General Orders No. 6, mentioned in the circular, directed the enforcement of the use of mosquito bars and the destruction of the larvæ of the mosquito by petroleum in all collections of standing water in the vicinity of military stations:

Upon the recommendation of the Chief Surgeon of the Department, the following instructions are published and will be strictly enforced at all military posts in this Department: The recent experiments made in Havana by the Medical Department of the Army having proved that yellow fever, like malarial fever, is conveyed chiefly, and probably exclusively, by the bite of infected mosquitoes, important changes in the measures used for the prevention and treatment of this disease have become necessary. 1. In order to prevent the breeding of mosquitoes and protect officers and men against their bites, the provisions of General Orders No. 6, Department of Cuba, Dec. 21, 1900, shall be carefully carried out, especially during the summer and fall. 2. So far as yellow fever is concerned, infection of a room or building simply means that it contains infected mosquitoes—that is, mosquitoes which have fed on yellow fever patients Disinfection, therefore, means the employment of measures aimed at the destruction of these mosquitoes. The most effective of these measures is fumigation, either with sulphur, formaldehyde or insect powder. The fumes of sulphur are the quickest and most effective insecticide, but are otherwise objectionable. Formaldehyde gas is quite effective if the infected rooms are kept closed and sealed for two or three hours. The smoke of insect powder has also been proved very useful; it readily stupefies mosquitoes, which drop to the floor and can then be easily destroyed. The washing of walls, ceilings and furniture with disinfectants is unnecessary. 3. At it has been demonstrated that yellow fever cannot be conveyed by fomites, such as bedding, clothing, effects and baggage, they need not be subjected to any special disinfection. Care should be taken, however, not to remove them from the infected rooms until after formaldehyde fumigation, so that they may not harbor infected mosquitoes. Medical officers taking care of yellow fever patients need not be isolated; they can attend other patients and associate with non-immunes with perfect safety to the garrison. Nurses and attendants taking care of yellow fever patients shall remain isolated, so as to avoid any possible danger of their conveying mosquitoes from patients to non-immunes. 4. The infection of mosquitoes is most likely to occur during the first two or three days of the disease. Ambulant cases—that is, patients not ill enough to take to their beds and remaining unsuspected and unprotected, are probably those most responsible for the spread of the disease. It is, therefore, essential that all fever cases should be at once isolated and so protected that no mosquitoes can possibly get access to them until the nature of the fever is positively determined. Each post shall have a "reception ward" for the admission of all fever cases and an "isolation ward" for the treatment of cases which prove to be yellow fever. Each ward shall be made mosquito-proof by wire netting over doors and windows, a ceiling of wire netting at a height of seven feet above the floor, and mosquito bars over the beds. There should be no place in it where mosquitoes can seek refuge, not readily accessible to the nurse. Both wards can be in the same building, provided they are separated by a mosquito-tight partition. 5. All persons coming from an infected locality to a post shall be kept under careful observation until the completion of five days from the time of possible infection, either in a special detention camp or in their own quarters; in either case, their temperature should be taken twice a day, during this period of observation, so that those who develop yellow fever may be placed under treatment at the very inception of the disease. 6. Malarial fever, like yellow fever, is communicated by mosquito bites, and, therefore, is just as much of an infectious disease and requires the same measures of protection against mosquitoes. On the assumption that mosquitoes remain in the vicinity of their breeding places, or never travel far, the prevalence of malarial fever at a post would indicate want of proper care and diligence on the part of the Surgeon and Commanding Officer in complying with General Orders No. 6, Department of Cuba, 1900. 7. Surgeons are again reminded of the absolute necessity, in all fever cases, to keep, from the very beginning, a complete chart of pulse and temperature, since such a chart is their best guide to a correct diagnosis and the proper treatment.

High Praise for Senn's Book.

Dr. Juan Redondo, chief surgeon of the Spanish fleet in the Spanish-American War, publishes a long and most flattering review of Dr. Senn's book, "The Medico-Surgical Aspects of the Spanish-American War," in the *Diario de la Marina*, of Madrid, May 6. The following extracts show the high esteem in which the book is held by the reviewer:

"It is very possible that the general sanitary inspections of the war and navy departments of the United States, in their reports and annual statistics, have given a minutely detailed account of the medical happenings of the campaign. But if such works exist, I for my part do not know them, and the truth is that the book of Dr. Nicholas Senn is the first work of this nature truly serious which I have received. * * * He has had opportunities to write a book which although referring only to the military operations of the Antilles, embraces the matter completely in its military and naval aspect, whose merits I can judge perhaps better than anybody else on account of my being the only Spanish doctor, or may be, of any other nationality, who after fighting in a vessel—and I employ the word in the true sense in which a naval doctor can and should employ it—fought afterwards on land during three months as doctor of the battalion formed with what remained of the crews of an unfortunate fleet. This book which I propose to make known among the medical men of our country's army and navy, if as I hope the author will allow me to translate into Spanish, is edited with an abundance of details and the richness of engravings which Americans use sometimes in this class of work, and artistically considered is a marvel. But high as its value is on this account, its real merit is not there, but in the abundance of matter which it studies, in the multitude of observed facts, in the experiences that can be derived from it, in the highly scientific principles of its author

and in the high and liberal spirit with which all its matters are treated. * * * He does not allow himself to be carried away by unreflecting enthusiasm that breed so many errors with many American writers. As a correct and elegant writer he must have taken special pains not to wound our patriotic sentiments when in a book of nearly 400 pages I only find half a dozen words which could pain us, and which if a second edition were made it would be easy for him to change by others which without altering the sense might lessen the cruelty of the expression. This can be of easy accomplishment, since more than once he calls the conduct of our admirals heroic, praises the devotion of our sailors and soldiers to their chiefs, judges in a very flattering manner the chivalry of the military doctors with whom he became acquainted in Santiago, and praises beyond measure a Spanish military surgeon who in Porto Rico nobly attended an American volunteer who, far from his people, was a victim of sunstroke and found completely abandoned in the field. I congratulate Dr. Senn on having written his interesting book, but may not finish without giving him my opinion, contrary to his, when he sustains a point with which I can not in any way accept. I have nothing to say of the motives his nation has had the first four times she has appealed to the supreme argument of arms, but must protest with all the energy of my soul against his branding as strangers in America those who knew how to give an impulse and bring forth to the realities of life the immense continent which was formerly lost in the farthest solitudes of a tempestuous and unknown ocean, and against his saying that the United States when obliging us to go to war with them were exclusively obeying a sentiment of humanity."

Association News.

Section Papers—Non-Members

To the Editor:—I have received a number of communications from members of the Association in which complaint was made that they could not get an opportunity to read their papers at the recent meeting at St. Paul. We have every reason to believe that the meeting to be held at Saratoga from June 10 to 13, 1902, will be one of the largest in the history of the Association, and that the Sections will at a very early date be filled by members applying for permission to read papers. It is a fact well known that every year certain men read papers before several of the Sections. This is not their fault, since they are invited to do so by different Section officers, but it should be understood that if a man has accepted an invitation in one Section he should not accept an invitation to occupy any time in another Section, and as an act of justice to the larger number I would earnestly call the attention of the chairman of each Section to this matter. I would also ask attention to the necessity of being careful not to permit any names to appear upon the program of the meeting of those who are not members of the AMERICAN MEDICAL ASSOCIATION. If a careful scrutiny is made of the list as the names come before the chairman of each Section, and if in case of doubt in regard to the standing of any applicant, information should be requested from the regular organization of the county in which he resides, the facts could be readily obtained and much embarrassment avoided.

Sincerely yours,

JOHN A. WYETH, President.

Portrait of Dr. N. S. Davis.

Through the courtesy of Mr. Charles S. Raddin, chairman of the Museum and Library Committee, the portrait of Dr. N. S. Davis, painted by Zan D. Klopper, of Chicago, has been loaned to and placed in the Chicago Academy of Sciences, and is labeled as follows: "Portrait of Dr. N. S. Davis, President American Medical Association, 1864-65. Loaned by the Association." Offers to furnish the portraits of other ex-presidents of the Association have been received.

J. R. PENNINGTON,
Chairman of Committee on Portraits of Ex-Presidents.

Minutes of the Sections.

Section on Hygiene and Sanitary Science.

TUESDAY, JUNE 4—AFTERNOON SESSION.

A paper on "State Supervision of Marriage; Its Feasibility, Scope, Justification, Possibilities," by Dr. W. H. Heath, of Buffalo, N. Y., was read by Acting Secretary Dr. J. Neely, of Chicago. It was discussed by Dr. Egbert, of Philadelphia; Dr. Liston H. Montgomery, of Chicago; Dr. Tuckerman, of Iowa; Dr. Ferd C. Valentine, of New York City.

WEDNESDAY, JUNE 5.

"Pulmonary Fearlessness," was read by Dr. William T. English, of Pittsburg.

"Limitation of Venereal Diseases," was read by Dr. Denslow Lewis, of Chicago, and discussed by Dr. Ferd C. Valentine, of New York; Dr. Howard A. Kelly, of Baltimore; Dr. Toper; Dr. Reed, of Wyoming; Dr. Tuckerman; Dr. Egbert; Dr. Fuller, of Iowa; Dr. Shrader; Dr. Montgomery, of Chicago, and closed by Dr. Lewis.

THURSDAY, JUNE 6—MORNING SESSION.

"Tuberculosis in the Middle States, and Its Curability," by Dr. John A. Robison, Chicago, was read by Dr. Montgomery, of Chicago.

"Tuberculosis Sanitaria," by Dr. C. P. Ambler, of Asheville, N. C., was read by Acting Secretary Dr. Neely, of Chicago.

"Tuberculosis of Animals in Some of Its Relations to Human Tuberculosis," was read by Dr. D. E. Salmon, Washington, D. C.

"The Experience of Syracuse, N. Y., with the Compulsory Tuberculin Test of all Dairies Furnishing Milk to the City," was read by Dr. B. S. Moore, Syracuse, N. Y.

"The Climatology of Arizona with Reference to the Treatment of Pulmonary Tuberculosis," was read by Dr. R. W. Craig, Phoenix, Ariz.

"Tuberculosis in Its Relation to the Welfare of the People of the United States in General and Colorado in Particular," by Dr. Wm. M. Danner, of Denver, Colo., was read by Dr. H. M. Bracken, of Minneapolis, Secretary of the Board of Health.

The above papers were discussed by Dr. Houghton, of Detroit, Mich.; Dr. Salmon, of Washington, D. C.; Dr. M. H. Reynolds, St. Anthony Park, Minn.; Dr. Norman Bridge, Los Angeles, Cal.; Dr. H. M. Bracken, Minneapolis, Minn.; Dr. B. S. Moore, Syracuse, N. Y.

Section on Stomatology.

TUESDAY, JUNE 4—3 P. M.

The Section was called to order by the Chairman, R. R. Andrews, Cambridge, Mass., at 3 p. m., in the Ladies' Ordinary of the Hotel Ryan.

Committee on Transactions reported that 1000 copies had been printer at a cost of $159.51, and distributed among dental and medical colleges.

The Committee on Education reported progress.

The president then delivered his annual address.

The regular program was then taken up with a Symposium on State Boards of Dental Examiners in their Relation to the Profession and the Colleges. The first paper was by Wm. Carr, New York City, on the subject of "Methods of Appointment: 1, by State Universities, New York; 2, by State Boards of State Officials ex-officio, Nebraska; 3, by Governors on Recommendation of the Profession." The paper was read by the secretary. Two papers were read by the secretary, for Geo. L. Parmele, Hartford, Conn., and V. E. Turner, Raleigh, N. C., on the subject of "Revenue for Conducting the Work of the Boards of Examiners: 1, by Taxation of the People; 2, by Fees from Examination of Candidates; 3, by Taxation of the Profession." The next paper was by Charles Chittenden, Madison, Wis., "The Dental College Standard: 1, Is It What it should be? 2, If Not, What Improvements should be made? 3, How May the Requirements be Improved?" The last paper on the program was on the subject of "Licensing: 1, by Examination; 2, by Diploma;" by J. A. Libby, Pittsburg, Pa. The papers were discussed by Drs. Talbot, Latham, Nones, Andrews, Dennis, Peck, Keoms and Chittenden.

On motion of Dr. Peck, the Section adjourned until 2 p. m., June 5.

WEDNESDAY, JUNE 5—2 P. M.

Section was called to order by the Chairman.

The following papers were read in a Symposium on Degeneracy of the Pulp: "Preliminary Work," by Eugene S. Talbot, Chicago; "Literature of the Pulp," by Vida A. Latham, Rogers Park, Ill.; "Cutting, Staining, and Mounting," by Martha Anderson, Moline, Ill. The symposium was discussed by Drs. R. R. Andrews, G. V. I. Brown, E. S. Talbot, and Vida A. Latham.

Dr. Alice Steeves, for the Nominating Committee, reported the following nominations for officers of the Section for the ensuing year: Chairman, A. H. Peck, Chicago; Secretary, Eugene S. Talbot, Chicago. Members House of Delegates, G. V. I. Brown, Milwaukee; and A. E. Baldwin, Chicago.

A paper on "Infectious Diseases" was read by Dr. Alice Steeves, Chicago, and was discussed by Drs. Latham, Bush, Carpenter, Baldwin, Kiernan, Brown, Andrews and Steeves.

"Periods of Stress and their Dental Marks" was the subject of a paper by Dr. Jas. G. Kiernan, Chicago. The paper was discussed by Drs. Talbot, Latham, Brown and Kiernan.

Dr. G. V. I. Brown, Milwaukee, read a paper on "Surgical Treatment of Cleft Palate." It was discussed by Drs. Kiernan, Wylis, Carpenter and Brown.

THURSDAY, JUNE 6.

Section was called to order at 2 p. m., by the chairman.

The first paper was by M. H. Fletcher, Cincinnati, on "The Tongue as a Breeding Place for Bacteria." The paper was read by the secretary, and was discussed by Drs. Talbot, Brown and Baldwin.

"Military Dental Practice: Its Modifications and Limitations," by Henry D. Hatch, New York City, and read by Dr. Baldwin. The subject was discussed in a paper by Dr. John S. Marshall, of Washington, read by the secretary. The paper was also discussed by Drs. Brown, Baldwin, Lyon, Orton, Chittenden Welrick, Latham, Talbot and Andrews.

Dr. G. V. I. Brown, Milwaukee, offered the following resolution, which on motion was unanimously adopted:

Resolved, That the secretary be instructed to write to Dr. John S. Marshall conveying to him the congratulations of this body upon his appointment, upon his paper and upon the excellent manner in which the committee has laid out the preliminary work it has undertaken, and assure him of our earnest support in that work.

"Simple Gingivitis" was the subject of a paper by Dr. Geo. T. Carpenter, of Chicago, and was discussed by Drs. Brown, Talbot, Latham, Baldwin, Carpenter and Andrews.

Adjourned *sine die*.

Section on Nervous and Mental Diseases.

TUESDAY, JUNE 4—AFTERNOON SESSION.

The meeting was called to order by Dr. H. A. Tomlinson, of St. Peter, Minn., Chairman.

Address of Chairman.

"Etiology of Paretic Dementia," by Dr. Frank P. Norbury, of Jacksonville, Ill. Discussion by Drs. Harold N. Moyer, of Chicago; E. G. Carpenter, of Columbus; Richard Dewey, of Wauwatosa, Wis.; Sidney Kuh, of Chicago; E. E. Mayer, of Pittsburg, and H. A. Tomlinson, and Frank P. Norbury.

"Symptomatology of Cerebral Hemorrhage" was read by Dr. F. Savary Pearce, of Philadelphia. Discussion by Drs. Hugh T. Patrick, of Chicago; F. W. Langdon, of Cincinnati; John Punton, of Kansas City; W. A. Jones, of Minneapolis; E. G. Carpenter, of Ohio, and F. Savary Pearce.

"What Can Be Done for the Epileptic in a Medical Way?" was read by Dr. R. H. Porter, of Chicago. Discussed by Drs. Lambert Ott, of Philadelphia; John Punton, of Kansas City; Hugh T. Patrick, of Chicago; C. Eugene Riggs, of St. Paul; Dr. Sexton, of Kansas City; F. Savary Pearce, of Philadelphia; E. E. Mayer, of Pittsburg; Warner, and Drew, of Massachusetts, and R. N. Porter, in closing.

WEDNESDAY, JUNE 5—AFTERNOON SESSION.

"The Treatment of the Acute Psychoses in Private Practice" was read by Dr. C. Eugene Riggs, of St. Paul, Minn. Discussion by Drs. Richard Dewey, of Wisconsin; John Punton, of Kansas City; Frank P. Norbury, of Jacksonville, Ill.; C. A. Drew, of Massachusetts; O. Everts, of Cincinnati; J. G. Biller, of Cherokee, Iowa; F. W. Langdon, of Cincinnati; M. B. Sexton, of Kansas City; F. Savary Pearce, of Philadelphia; Harold N. Moyer, of Chicago; H. A. Tomlinson, of Minnesota; James G. Kiernan, of Chicago, and E. Riggs, in closing.

A Symposium on Syphilis of the Brain consisted of "Nervous Manifestations," by Dr. Hugh T. Patrick, of Chicago; "The Psychosis in Cerebral Syphilis," by Dr. Richard Dewey, of Wauwatosa, Wis.; and "Syphilis of the Nervous System; Its General Pathology, with Remarks on Treatment," by Dr. F. W. Langdon, of Cincinnati. Discussion by Drs. C. B. Burr, of Flint, Mich.; H. D. Valin, of St. Peter, Minn.; E. G. Carpenter, of Columbus; John Punton, of Kansas City; E. E. Mayer, of Pittsburg; Sydney Kuh, of Chicago; Frank P. Norbury, of Illinois; and closed by Drs. Dewey and Langdon.

"Suggestions for Lessening the Frequency of Relapse After Treatment for Morphinism," was read by A. J. Pressey, of Cleveland, and discussed by Drs. T. D. Crothers, of Hartford, Conn.; John Punton, of Kansas City; Frank P. Norbury, of Illinois; Lambert Ott, of Philadelphia; and A. J. Pressey, in closing.

"Injuries, Feigned and Real, with Their Differentiation and Medicolegal Aspect," was read by Lambert Ott, of Philadelphia, and discussed by Drs. Harold N. Moyer, of Chicago; Leo M. Crafts, of Minneapolis; Richard Dewey, of Wisconsin; J. G. Biller, of Iowa; Herman Gasser, of Platteville, Wis.; F. Savary Pearce, of Philadelphia; Dr. Leaming, of Chicago, and closed by Dr. Ott.

On motion of Dr. Frank P. Norbury, a message of sympathy was sent to Dr. J. T. Eskridge, of Denver, Colo., who was detained at home by illness.

THURSDAY, JUNE 6—MORNING SESSION.

"Treatment of Neurasthenia" was read by J. G. Biller, of Iowa, and discussed by Drs. Hugh T. Patrick, of Chicago; McBride, of California; John Punton, of Kansas City; C. Eugene Riggs, of St. Paul; Harold N. Moyer, of Chicago; F. Savary Pearce, of Philadelphia; H. A. Tomlinson, and J. G. Biller.

"The Psychoses of Chorea" was read by Dr. Harold N. Moyer, of Chicago, and discussed by Drs. Riggs, of St. Paul; E. G. Carpenter, of Ohio; Edward E. Mayer, of Pittsburg; and John Punton, of Kansas City.

"Three Cases of Paralysis of the Serratus Magnus and the Trapezius: Alar Scapula," was read by Dr. Augustus A. Eshner, of Philadelphia, and discussed by Dr. Pearce, of Philadelphia.

"Mirror Writing and Inverted Vision" was read by Dr. Albert B. Hale and Sydney Kuh, of Chicago, and discussed by Drs. Sweeney, of St. Paul; Richard Dewey, of Wisconsin; Herman Gasser, of Wisconsin; and S. Kuh, in closing.

THURSDAY, JUNE 6—AFTERNOON SESSION.

"Ten Cases of Acute Infectious Multiple Neuritis" was read by Dr. W. A. Jones, of Minneapolis, and discussed by Drs. Patrick, of Chicago; H. N. Moyer, of Chicago; and W. A. Jones, in closing.

"Fear as an Element of Nervous Diseases, and Its Treatment," was read by Dr. John Punton, of Kansas City. "A Case of Localized Amnesia, with Remarks Thereon," was read by Dr. Edward E. Mayer, of Pittsburg. Discussion by Drs. T. D. Crothers, of Hartford; McBride, of California; Riggs, of St. Paul; Moyer, of Chicago; Jones, of Minneapolis; Pearce, of Philadelphia; and Mayer.

"Dementia Following Inebriety" was read by T. D. Crothers, of Hartford, and discussed by Drs. C. A. Drew, of Massachusetts, and T. D. Crothers, closing the discussion.

"The Importance of Heredity as a Cause of Insanity" was read by Dr. Arthur McGugan, of Michigan, and discussed by Drs. Mayer, of Pittsburg; Dewey, of Wisconsin; Crothers, of Connecticut; Drew, of Massachusetts; Drayton, of New York; Joseph F. Robinson, of Nevada, Mo.; Pearce, of Philadelphia; Tomlinson, and McGugan.

The Chairman announced that under the provisions of the reorganization scheme it becomes necessary for each Section to elect two delegates. This must be done at this session, as the House of Delegates will convene at the beginning of the next meeting of the Association.

Dr. Hugh T. Patrick, of Chicago, said it was designed that the retiring Chairman should be one of the two delegates. Moved and carried that the Chairman be selected as a Delegate.

Dr. W. A. Jones, of Minneapolis, moved that the selection of the second Delegate be left to the Nominating Committee. Carried.

Report of the Nominating Committee: Dr. Patrick, the Chairman of the Nominating Committee, reported that Dr. J. T. Eskridge, of Denver, had been selected as Chairman for the next year. As Dr. Eskridge is in poor health, and may not be able to attend the meeting on that account, Dr. Richard Dewey, of Wauwatosa, Wis., had been selected as Alternate. Secretary, Dr. F. Savary Pearce, of Philadelphia.

It was moved and seconded that the report of the Nominating Committee be accepted. Carried.

Dr. Harold N. Moyer, of Chicago, was selected as the second member of the House of Delegates, to serve for two years.

"Persistent Brachial Neuralgia from Hypodermic Injection—Incipient Amyotrophic Lateral Sclerosis, with Recovery," was read by Dr. Leo M. Crafts, of Minneapolis.

Section on Cutaneous Medicine and Surgery.

FIRST DAY, JUNE 4.

Address of Chairman, W. L. Baum, on "Ancient and Modern Conceptions of Syphilis."

"Pathology and Treatment of Cutaneous Cancer, with Special Reference to Its Non-Parasitic Nature," was read by Dr. M. L. Heidingsfeld. It was discussed by Drs. W. T. Corlett, W. A. Pusey, E. L. Schmidt, Joseph Zeisler, Burnside Foster, D. W. Montgomery, D. Lieberthal, C. W. Allen, A. W. Brayton, and M. L. Heidingsfeld.

"Syphilis and Its Relations to Blastomycetic Dermatitis" was read by Dr. Henry G. Anthony. It was discussed by Drs. J. Nevins Hyde, F. H. Montgomery, Joseph Zeisler, A. W. Brayton, R. R. Campbell, M. Herzog, F. H. Montgomery, and H. G. Anthony.

"Notes on a Case of Keratosis Follicularis (Porospermosis)" was read by Dr. Joseph Zeisler, and discussed by Dr. F. H. Montgomery.

The Chairman appointed as Nominating Committee, Drs. Corlett, of Cleveland; Anthony, of Chicago; and Sumney, of Omaha.

It was moved and carried that the Chairman appoint a committee of three to draft a Constitution and By-Laws for the Section, to be reported at the next annual meeting. Carried.

SECOND DAY, JUNE 5.

Dr. Burnside Foster, of St. Paul, presented a Case of Lupus Erythematosis, One of Congenital Nevus Pigmentosus. He also reported a case of Leprosy in a man who had never been outside of Minnesota. These cases were discussed by Drs. Zeisler, D. W. Montgomery, Corlett, Bulkley, Schuler, and Frick.

The Nominating Committee reported Henry W. Stelwagon, of Philadelphia, for Chairman, and R. R. Campbell, of Chicago, for Secretary. Elected by unanimous vote.

"Lantern Slide Demonstration on Skin Cancer," by Dr. M. L. Heidingsfeld, of Cincinnati, was discussed by Drs. F. H. Montgomery and J. Nevins Hyde.

J. Nevins Hyde and F. H. Montgomery demonstrated "Blastomycosis of the Skin" with lantern slides. Discussion was by Dr. Joseph Zeisler, Chicago.

Dr. W. T. Corlett, of Cleveland, demonstrated, by lantern slides, "The Exanthemata." Dr. S. Pollitzer, New York City, read a paper on "Smallpox."

Dr. David Lieberthal, of Chicago, discussed "Phototherapy in Cutaneous Medicine."

A paper by Dr. L. E. Schmidt, of Chicago, on "Epidermolysis Bullosa Hereditaria," was discussed by Drs. M. L. Heidingsfeld and F. H. Montgomery.

A paper on "Epithelioma of Long Duration," by Dr. William Frick, of Kansas City, was discussed by Drs. M. L. Heidingsfeld and Anthony.

THIRD DAY—JUNE 6.

A paper on "Rhinoscleroma," was read by Dr. Charles Warrenne Allen (by invitation), New York City, and discussed by Drs. J. Nevins Hyde, and D. Lieberthal, of Chicago; Hall, of Kansas City, and Charles W. Allen.

Drs. Charles W. Allen, of New York City, and W. L. Baum, of Chicago, were elected delegates to the House of Delegates.

Dr. David Lieberthal read a paper on "Lichen Hypertrophicus." It was discussed by Drs. Wm. Frick, Kansas City; Charles W. Allen, New York City; D. W. Montgomery, San Francisco; H. G. Anthony, Chicago; W. T. Corlett, Cleveland; L. Duncan Bulkley, New York City; R. R. Campbell, Chicago; H. C. Sumney, Omaha; M. L. Heidingsfeld, Cincinnati, and D. Lieberthal, Chicago.

A paper on "Notes on Recent Cases of Extra-genital Chancre," was read by Dr. L. Duncan Bulkley, New York City, and discussed by Drs. Baldwin, Chicago; E. L. Schmidt, Chicago; Montgomery, San Francisco; Charles W. Allen, New York City; R. R. Campbell, Chicago; D. Lieberthal, Chicago; W. T. Corlett, Cleveland, and L. Duncan Bulkley.

A case of dermatitis herpetiformis, in a physician, was demonstrated.

The Section adjourned *sine die*.

Section on Laryngology and Otology.

TUESDAY, JUNE 4—AFTERNOON SESSION.

The Section was called to order at 2:30 p. m.

There being no committees to report, the first order of business was the "Address of Chairman," by Dr. John N. Mackenzie, of Baltimore, Md.

Two members of the Executive Committee being absent, the Chairman appointed two members to fill the vacancies. The Committee was then as follows: Emil Mayer, of New York City; W. E. Casselberry, of Chicago, and J. E. Logan, of Kansas City, Mo.

The Chairman stated that the reading of papers would be limited

to twenty minutes and discussions to five minutes, and that papers not present when called would be deferred until all papers on the program for the session were called, and if not reached would then take their place at the end of a succeeding session.

The Chairman appointed Dr. C. M. Cobb, of Lynn, Mass., on the Banquet Committee.

"The Treatment of Laryngitis" was read by Dr. O. T. Freer, of Chicago, and discussed by Drs. E. Fletcher Ingals, of Chicago; Robert Levy, of Denver, and the Essayist.

"Edematous Laryngitis, with Report of Case," was read by Dr. J. S. Gibb, of Philadelphia.

"Total Extirpation of Thyroid Gland" was read by Dr. G. F. Cott, of Buffalo, and discussed by Dr. J. Holinger and the Essayist.

The Chair appointed the following Nominating Committee: E. Fletcher Ingals, of Chicago; S. E. Solly, of Colorado Springs, and Emil Mayer, of New York City.

WEDNESDAY, JUNE 5—MORNING SESSION.

The first paper read was "Types of Membranous Pharyngitis," by Dr. W. E. Casselberry, of Chicago. It was discussed by Drs. Emil Mayer, of New York City; B. R. Shurly, of Detroit; Emil Amberg, of Detroit; J. Holinger, of Chicago, and the Essayist.

"The Relation of the Middle Turbinate Body to Chronic Nasal Diseases" was read by Dr. C. S. Baker, of Bay City, Mich., and discussed by Drs. J. F. Barnhill, of Indianapolis; W. E. Casselberry, of Chicago; G. O. Woolen, of Indianapolis; C. M. Cobb, of Lynn, Mass.; D. A. Kuyk, of Richmond, Va.; E. Fletcher Ingals, of Chicago; Emil Mayer, of New York City; J. Holinger, of Chicago, and the Essayist.

"Asthma as a Result of Nasal Conditions: Treatment, etc.," was read by Dr. J. A. Farren, of Chicago, and discussed by Drs. G. N. Jack, of New York; J. F. Barnhill, of Indianapolis, and Farren, in closing.

"An Unusual Anomaly Affecting the Faucial Tonsil," by Dr. George L. Richards, of Fall River, Mass., was read by Dr. C. M. Cobb, of Lynn, Mass. "The Effect which the so-called Catarrhal Disease of the Nose and Throat may have upon the General Health" was read by Dr. C. M. Cobb, of Lynn, Mass., and the papers by Drs. Richards and Cobb were discussed by Drs. W. E. Casselberry, of Chicago; G. O. Woolen, of Indianapolis; L. C. Cline, of Indianapolis; D. Roy, Atlanta; D. A. Kuyk, of Richmond, Va.; O. T. Freer, of Chicago; J. A. Farren, of Chicago, and C. M. Cobb, in closing.

WEDNESDAY, JUNE 5—AFTERNOON SESSION.

The Section members convened at 2:15 p. m.

The report of the Nominating Committee was received through Dr. Emil Mayer, recommending as officers of the Section: Dr. G. Hudson Makuen, of Philadelphia, as Chairman, and Dr. J. F. Barnhill, of Indianapolis, as Secretary. On motion, the Secretary cast the ballot of the Section for the election of the officers named.

On motion by Dr. E. Fletcher Ingals, of Chicago, the Section proceeded to the election of a Committee on Nominations. The following nominations of committeemen were made: Drs. E. Fletcher Ingals, of Chicago; W. E. Casselberry, of Chicago; O. T. Freer, of Chicago; C. M. Cobb, of Lynn, Mass.; S. Johnston, of Baltimore.

The Chair appointed as tellers Drs. Dickerman and Jackson. On the first ballot Drs. Ingals and Cobb were declared elected. There was a tie vote between Drs. Casselberry and Johnston. Drs. Casselberry and Johnston withdrew their names, and Dr. Casselberry nominated Dr. G. Hudson Makuen, of Philadelphia. On motion the Secretary cast the ballot of the Section for the election of Dr. Makuen.

"Empyema of the Frontal Sinus" was read by Dr. E. Fletcher Ingals, of Chicago. "Anomalies of the Frontal Sinus and their bearing on Chronic Suppurative Sinusitis," by Dr. Redmond W. Payne, of San Francisco. The papers by Drs. Ingals and Payne were discussed by Dr. Edward T. Dickerman, of Chicago, and closed by Drs. Ingals and Payne.

"Carcinoma of the Naso-Pharynx" was read by Dr. Chevalier Jackson, of Pittsburg, Pa.; "Sarcoma of Nasal Passages, with Report of Cases," by Dr. Dunbar Roy, of Atlanta, Ga.

Dr. E. Fletcher Ingals, of Chicago, reported, for the Committee on Nomination, the following nominations for members of the Nominating Committee: Drs. Emil Mayer, of New York City; George C. Stout, of Philadelphia; W. E. Casselberry, of Chicago; J. E. Logan, of Kansas City, and E. T. Dickerman, of Chicago. On ballot the following were elected a Nominating Committee: Dr. Emil Mayer, of New York City, for two years, and Dr. George C. Stout, of Philadelphia, for one year.

"Case of Epithelioma Involving the Tonsil, Faucial Pillar, Tongue and Buccal Surface, with Treatment and apparent Cure," was read by Dr. S. A. Oren, of Lanark, Ill. The papers by Drs. Jackson, Roy and Oren were discussed by Drs. O. T. Freer, of Chicago; John N. Mackenzie, Baltimore; C. N. Cobb, of Lynn, Mass.; J. Holinger, of Chicago, and Jackson, Roy and Oren, in closing.

"The Changes in the Facial Bones due to Adenoids" was read by Dr. A. T. Mitchell, of Vicksburg, Miss.

"A modified Leiter apparatus for the ear" was exhibited by Dr. Emil Amberg, of Detroit.

THURSDAY, JUNE 6—MORNING SESSION.

The members convened at 9:30 a. m.

"The Diagnosis and Treatment of Mastoiditis" was read by Dr. E. B. Dench, of New York City, and discussed by Drs. J. Holinger, of Chicago; Redmond Payne, of San Francisco; Emil Amberg, of Detroit; S. A. Oren, of Lanark, Ill.; Hiram Woods, Jr., of Baltimore; Sherman, of Cleveland; C. M. Cobb, of Lynn, Mass.; J. F. Barnhill, of Indianapolis; A. E. Prince, of Springfield; Camden, of Detroit; C. H. Baker, of Bay City; D. A. Kuyk, of Richmond; Robert Levy, of Denver; Brownell, of New York, and Dench, in closing.

"Mastoiditis after Subsidence and without Recurrence of Tympanic Disease," was read by Dr. Hiram Woods, Jr., of Baltimore, and discussed by Drs. E. B. Dench, of New York City; H. Harlan, of Baltimore; Emil Amberg, of Detroit; George C. Stout, of Philadelphia; Cornelius Williams, of St. Paul, and Woods, in closing.

On motion by Dr. D. A. Kuyk, of Richmond, Va., the Secretary of the Section was instructed to send out requests for laryngologic and otologic specimens for the pathologic exhibit at the next meeting.

THURSDAY, JUNE 6—AFTERNOON SESSION.

The members convened at 2:30 p. m.

"Report of Case of Unusual and Interesting Tertiary Manifestations" was read by Dr. G. Hudson Makuen, of Philadelphia, and discussed by Drs. W. E. Casselberry, of Chicago; G. C. Stout, of Philadelphia, and Makuen, in closing.

A microscopic specimen was presented by Dr. J. Holinger, of Chicago, illustrating spongifying of the capsule of the labyrinth (sclerosis). It was discussed by Dr. C. M. Cobb, of Lynn, Mass.

The Section then adjourned *sine die*.

Section on Materia Medica, Pharmacy and Therapeutics.

TUESDAY, JUNE 4—AFTERNOON SESSION.

Chairman, Dr. N. S. Davis, Jr., called Section to order at 2 p. m.

In the absence of Dr. J. M. Upshur, the Secretary, Frank Woodbury, of Philadelphia, was elected Secretary. Dr. A. B. Lyons offered motion of sympathy to Dr. Upshur in his illness, which was carried.

The Chairman appointed Drs. Hallberg, G. F. Butler and Jas. G. Kiernan to represent the Section in General Executive Committee.

Dr. W. Byron Coakley, of Chicago, read a paper on "Experimental Work in Intra-organic and Venous Injections and Blood Extracts in the Cure of Acute Organic Diseases." Dr. O. T. Osborne, New Haven, read a paper on "Therapeutic Indications Presented by the Conditions of the Blood in Disease." Discussion of both papers combined, by Coakley and Osborne.

Dr. John H. Musser, of Philadelphia, made a communication on "Chronic Myocarditis." Discussion by Drs. Henry Beates, S. E. Solly, O. F. Osborne, W. W. Tompkins, and Musser.

Dr. Heinrich Stern, New York, read a paper on "Treatment of Obesity."

Dr. Harold N. Moyer read a paper on "Treatment of Neurasthenia." Discussion by Drs. Shelly, Stern, Putney and Moyer.

On motion, the Chair appointed Nominating Committee: A. B. Lyons, of Detroit; O. T. Osborne, of New Haven; J. M. Dodson, of Chicago.

WEDNESDAY, JUNE 5—MORNING SESSION.

Dr. F. T. Wahrer, of Fort Madison, read a paper on "A Plea for More Uniformity and Strength in Our Armamentarium." Dr. A. B. Lyons, of Detroit, read a paper on "Standardization of Crude Drugs and Galenical Preparations." Discussion by Drs. Hallberg, Walling, Wilson, Dickerson, and the Chairman.

The Chair read a communication from the American Pharmaceutical Association, announcing names of Delegates to this Section: F. J. Walling, E. Floyd Allen, Wm. A. Frost, Charles T. Hiller, Saul F. Boyce, A. B. Prescott, E. M. Houghton, F. E. Stewart, S. E. Jelliffe, H. K. Mulford, H. R. Slack, C. H. G. Kile, F. S. Hereth, W. M. Sempill, G. M Beninger, C. S. N. Hallberg. On motion these delegates were invited to take part in the discussion and become members of Section for this meeting.

WEDNESDAY, JUNE 5—AFTERNOON SESSION.

Dr. S. E. Solly, of Colorado Springs, made a communication entitled "Indication for and Utility of Altitude Treatment of Pulmonary Tuberculosis." Dr. Norman Bridge, Los Angeles, read a paper on "Adaptability of Southern California and Similar Climates to the Needs of Consumptives." Dr. A. Burroughs, Asheville, read report on "Nineteen Years' Experience with Creosote in Tuberculosis." Dr. Arnold C. Klebs, Chicago, read a paper on "Specific Therapeutics in Pulmonary Tuberculosis." Dr. Norman Bridge read a paper on "Proper Management of the Tuberculous Lung." Discussion by Drs. Rochester, Bonney, Miner, More, Solly, Bridge and Hallberg.

Dr. DeLancey Rochester, of Buffalo, read a paper on "Treatment of Lobar Pneumonia." Dr. L. Dickerson, of St. Louis, on "The Abortion Treatment of Pneumonia; a Plea for the Use of Cardiac Depressants in the Treatment of the Congestion Stage of Pneumonia." Discussion by Drs. Rochester, Dickinson, Spilman, More, Caston, McCoy, Hawkins, and Chairman.

The report of the Nominating Committee was presented, naming Drs. G. F. Butler, of Alma, Mich., for Chairman, and Dr. C. N. Hallberg, of Chicago, for Secretary. On motion the report was adopted and candidates unanimously elected.

THURSDAY, JUNE 6—MORNING SESSION.

Dr. Boardman Reed, of Philadelphia, read a paper on "Influence of Certain Common Remedies upon Gastric Functions." Dr. Gustav Fuetterer, of Chicago, read a paper on "Treatment of Gastric Ulcer." Dr. Charles G. Stockton, of Buffalo, read a paper on "Treatment of Gastric Hyperesthesia." Discussion by Drs. Herrick, Tompkins, Fuetterer, Osborne, Johnson, Stern, McCoy, Westbrook, McCrae, Reed, and Stockton.

THURSDAY, JUNE 6—AFTERNOON SESSION.

On motion the Chairman was authorized to name the two representatives of this Section in the House of Delegates. The following members were appointed delegates from Section on Materia Medica, Pharmacy and Therapeutics: Drs. O. T. Osborne, of New Haven, and A. B. Lyons, of Detroit.

In the absence of the author, an abstract of a paper on "Theory and Practice of Organotherapy," by Dr. Solomon Solis-Cohen, of Philadelphia, was read by the Secretary. Dr. Sidney Kuh, of Chicago, read a paper on "Akromegaly Treated with Pituitary Body." Dr. John M. Dodson, Chicago, read the report of a case of "Treatment of Graves' Disease with Thymus Extract." Discussed by Drs. Osborne, Boardman Reed, Davis, Woodbury, Shelly, Vaughan, Stern, Kuh and Dodson.

Dr. E. F. Houghton, of Detroit, read a paper on "Pharmacology of the Suprarenal Gland and a Method of Assaying Its Products." Dr. Jokichi Takamine, of New York, read a paper on "The Active Principle of Suprarenal Glands." Discussed by Drs. Vaughan, Stern, Reed, Dodson, Houghton and Takamine.

A communication from the Business Committee was presented by Drs. Billings and Bridge relative to consolidating the Section. Dr. Osborne moved that this Section be divided and the part of Therapeutics and Pharmacy be transferred to the Section on Practice, and the Materia Medica be consolidated with Physiology and Pathology. On motion the Chairman appointed a committee

sons sitting of Drs. Osborne and Lyons, to confer with the members of the Section on Physiology and Pathology to determine upon the officers of the combined Sections for the next meeting.

A vote of thanks was passed to the officers of the Section for the efficient and faithful performance of their duties.

The Section adjourned *sine die.*

Section on Physiology and Dietetics.

FIRST DAY—JUNE 4.

The meeting was called to order by Dr. W. S. Hall, of Chicago, in the absence of the Chairman.

Two vacancies in the Executive Committee were filled by the appointment of Dr. Charles Hazen, of Virginia, to fill the unexpired term of Dr. Randall Hunt, of Shreveport, La.; and of Dr. R. Harvey Cook, of Ohio, to take the place of Dr. James Weir, Jr., of Owensboro, Ky.

Communications were received from the General Executive Committee of the Association to meet with the Committee on Reorganization at 3 p. m.; and to meet the General Executive Committee each day at 5 p. m. for the general business of the Association.

The advisability of a fusion with the Section on Pathology and Bacteriology was considered and the Executive Committee directed to confer with the Executive Committee of the Section on Pathology and Bacteriology with this end in view for 1902.

Owing to the absence of two members on the program for papers, a motion to combine the programs of June 4 and 5 was carried, and the Section dismissed to meet at 2 p. m., June 5.

SECOND DAY—JUNE 5.

Section was called to order, in the absence of the Chairman, by Dr. Winfield S. Hall, of Chicago.

Dr. Hall moved that owing to the impossibility of Dr. Lee attending the meeting, Dr. Charles M. Hazen be elected Chairman for the balance of the St. Paul meeting. The motion was carried.

Dr. Hall reported that pursuant to the action of the previous day, the Executive Committee of the Section had met the Executive Committee of the Section on Pathology and Bacteriology in the interest of fusing the two Sections; and that the two committees were very easily brought to a common understanding as to how this fusion should be brought about. The members of these two committees being members of the General Executive Committee, yesterday recommended that the fusion be made, to take effect in 1902. The Section on Pathology and Bacteriology is to grant to the Section on Physiology and Dietetics one member from that Section on the Executive Committee. They accord to the physiologists the Chairman every third year; and to the pathologists and pharmacologists the other two years.

It was moved that the Chairman and Secretary represent the Section on Physiology and Dietetics in conference with the Nominating Committee of the Section on Pathology and Bacteriology to see that the physiologists shall be represented in their Executive Committee, and in the offices of the new amalgamated Section. Carried.

Dr. Hall reported that it had been proposed to him to include also in this fusion the pharmacologists so that the whole field of experimental medicine might be grouped in one section.

Dr. Winfield S. Hall read a paper on "The Evaluation of Anthropometric Data," and was discussed by Drs. John Madden, of Milwaukee, and H. S. Drayton, of New York City. Dr. Hall closed the discussion.

Dr. John Madden, of Milwaukee, read a paper on "The Education of the Degenerate—A Physicobiologic Study." It was discussed by Drs. Winfield S. Hall, of Chicago; H. S. Drayton, of New York City; James Putney, of Charleston, and John Madden, in closing.

Dr. H. S. Drayton, of New York City, read a paper on "The Nervous Relation in Diseases of the Nutritive System." It was discussed by Drs. W. S. Hall, of Chicago, and H. S. Drayton, in closing.

A paper entitled "Isolation of the Active Principles of the Suprarenal Gland—A Review of the Work," by Dr. T. B. Aldrich, of Detroit, was read by Dr. E. M. Houghton, of Detroit.

On motion, Dr. L. Duncan Bulkley, of New York City, and Dr. R. Harvey Cook, of Oxford, Ohio, were elected to represent the Section on Physiology and Dietetics in the House of Delegates, and Dr. John Madden, of Milwaukee, as alternate.

THIRD DAY—JUNE 6.

Dr. D. E. Salmon, of Washington, D. C., read a paper on "Food Products from Diseased Animals." It was discussed by Drs. Chas. M. Hazen, of Richmond, Va.; Winfield S. Hall, of Chicago; David Paulson, of Chicago; R. Harvey Cook, of Oxford, Ohio, and Salmon, in closing.

A paper, "Living on Bread," by Dr. Alexander Haig, London, Eng., was read by the Secretary, and discussed by Drs. Winfield S. Hall, of Chicago; David Paulson, of Chicago, and R. O. Beard, of Minneapolis.

The Secretary was directed to write a note of thanks to Dr. Haig for his paper.

"The Teaching of Practical Dietetics in Medical Schools" was read by Dr. R. O. Beard, of Minneapolis, and discussed by Drs. Winfield S. Hall, of Chicago; Stewart, of Michigan, and C. M. Hazen, of Richmond, and Dr. R. O. Beard, in closing.

A paper on "Ponto-Bulbar Heat Center," by Dr. Edward T. Reichert, of Philadelphia, was read by the Secretary, and discussed by Dr. Beard, of Minneapolis.

The Section adjourned *sine die.*

Section on Pathology and Bacteriology.

TUESDAY, JUNE 4—AFTERNOON SESSION.

The Section was called to order by the Chairman.

Address by the Chairman, Ludvig Hektoen, of Chicago.

The following papers were read: "Effect of Direct, Alternating and Tesla Currents and X-rays on Bacteria," by F. Robert Zeit, of Chicago; "Demonstration of Specimens, Slides and Photomicrographs of Uretero-Intestinal Anastomosis," by F. Robert Zeit, of Chicago; "Demonstration of the Van Gehuchten-Nelis Histologic Reaction for Hydrophobia and Remarks on Hydrophobia in Ohio," by A. P. Ohlmacher, of Gallipolis, Ohio; "Carcinoma of the Lung," by E. R. Le Count, of Chicago; "The Influence of Structure and Locality on Pathological Processes," by J. S. Foote, of Omaha, Neb.

It was moved by Dr. Stengel, duly seconded, that the Chairman appoint a Nominating Committee. Carried.

The Chair appointed as such Committee Drs. W. A. Evans, Frank B. Wynn, and Joseph McFarland.

It was moved by Dr. Stengel, duly seconded, that the matter of consolidating the Sections on Pathology and Bacteriology and Physiology and Dietetics be referred to the Executive Committee, with the recommendation of favorable action thereon. Carried.

On motion of Dr. Wells, duly seconded, Dr. Ohlmacher was made a member of the Executive Committee, vice Dr. W. G. Spiller, absent.

WEDNESDAY, JUNE 5—MORNING SESSION.

Section called to order by the Chairman.

The following papers were read: "The Endothelial Cells in Acute and Chronic Infections," by E. R. Le Count, of Chicago; "The Mast Cells in Acute and Chronic Infections," by Herbert U. Williams, of Buffalo (by invitation). The papers were discussed by Drs. Wells, of Chicago, and H. D. Vallens, of St. Peter. "Some Studies of Venoms and Antivenin" was read by Joseph McFarland, of Philadelphia.

WEDNESDAY, JUNE 5—AFTERNOON SESSION

Section called to order by the Chairman.

The Nominating Committee submitted the following report, and, on motion of Dr. Herzog, the same was adopted: Chairman, Frank B. Wynn, of Indianapolis; Secretary, W. T. Howard, of Cleveland. For Executive Committee: Terms to expire in 1902, A. Stengel, of Philadelphia; term to expire in 1903, W. S. Hall, of Chicago; term to expire in 1904, Ludvig Hektoen, of Chicago.

On motion of Dr. W. T. Howard, duly seconded, the General Executive Committee of the Association was urged to recommend to appropriate $500 to cover the expenses of a pathological exhibit at the meeting of 1902.

"Primary Sarcoma of the Esophagus and Stomach," was read by W. T. Howard, Cleveland, and discussed by Dr. Le Count, and, in closing, by Dr. Howard.

"A Study of a Fetal Stomach, with Special Reference to the Origin of Acid-Secreting Cells," by W. A. Evans and William Becker, Chicago.

"Report of a Case of Primary Carcinoma of the Appendix, and a Case of Lymphosarcoma of the Intestine, with a Discussion of the Etiology of the Latter," by S. M. White, Minneapolis.

"Isolation of Bacillus Typhosus from Unusual and Interesting Localization," by O. M. McDaniel, Minneapolis. Discussion was by Drs. Herzog and Westbrook.

"Notes on the Bacteriology and Morbid Histology of Cerebrospinal Meningitis," was read by L. B. Wilson, Minneapolis, and discussed by Dr. Hall.

"On the Growth of Epithelium," was read by Leo Loeb, Chicago, and discussed by Dr. Le Count.

THURSDAY, JUNE 6—MORNING SESSION.

Section called to order by Dr. Howard, in the absence of the Chairman.

Secretary-elect Howard presented his resignation as Secretary for the ensuing year, and, on motion of Dr. Stengel, the resignation was accepted.

On motion of Dr. Stengel, Dr. Joseph McFarland, of Philadelphia, was elected Secretary for the ensuing year.

The Secretary presented a bill of $184.45 for carpenter work, etc., in the pathological exhibit, and on motion of Dr. Stengel, duly seconded, the bill was referred to the Local Committee, with a demurrer as to the amount thereof.

"On the Nature and Significance of Granular Degeneration of Red Corpuscles," by Alfred Stengel, Philadelphia.

"Study of an Epidemic Among Guinea Pigs in the Laboratory," by Victor C. Vaughan, Ann Arbor, Mich.

"The Influence of Boric Acid and Borax on Milk Bacteria," by Wm. H. Veenboor, Ann Arbor, Mich.

"The Influence of Formaldehyde on Milk Bacteria," by Victor C. Vaughan, Ann Arbor, Mich.

Specimens of annular pancreas were exhibited by Dr. Edward F. Wells, of Chicago, for Dr. Theo. Tieken.

On motion of Dr. McFarland, duly seconded, the following members were elected as delegates to the House of Delegates: For one year, Dr. Alfred Stengel, Philadelphia, and for two yars, Dr. Wm A. Evans, Chicago.

On motion of Dr. Ohlmacher, Dr. Charles Hazen, of Richmond, Va., was duly elected Treasurer of the Section.

On motion of Dr. Wynn, Physiology and Pathology was adopted as the title of the consolidated Sections.

The Section adjourned *sine die.*

List of Association Members Registered in the Different Sections at St. Paul, June 4-7, 1901.

The total registration at the St. Paul meeting was 1806.

SECTION ON PRACTICE OF MEDICINE.

Allen H. B., Cloquet, Minn.
Archibald F. M., Atwater, Minn.
Allen U., Jersey City, N. J.
Ankrim L. F., Pittsburg, Pa.
Arzt C. P., St. Paul, Minn.
Aud C. Z., Cecilian, Ky.
Bennett M. R. B., New York City.
Bailey William, Louisville, Ky.
Buren C R., Modena, Mo.
Boyd C. A., Lewiston, Minn.
Beebe W. L., St. Cloud, Minn.
Burrs W. B., Memphis, Tenn.
Bundy A. D., Osage, Iowa.
Bullard F. D., Los Angeles, Cal.
Bailey S., Mt. Ayr, Iowa.
Bodine J. M., Louisville, Ky.
Benjamin A. E., Minneapolis, Minn.
Brayton S., Evanston, Ill.
Breuer C. H., David City, Neb.
Burroughs J., Ashville, N. Y.
Boston L. N., Philadelphia, Pa.
Bliss J. W., Saginaw, Mich.
Beck W. M., Hanley Falls, Minn.
Bushong P. W., Summer Shade, Ky.
Boyd J. P., Akron, O.
Brookings D. J., Woodward, Ia.
Blanchard L., Edgewood, Iowa.
Buchanan J. R., Nevada, Mo.
Barr Wm. H. T., Agricultural College, Miss.

Barnes H. E. W., Creston, Iowa.
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Therapeutics.

[It is the aim of this department to aid the general practitioner by giving practical prescriptions and, in brief, methods of treatment for the diseases seen especially in every-day practice. Proper inquiries concerning general formulae and outlines of treatment will be answered in these columns.]

Treatment of Puerperal Eclampsia.

R. P. R. Lyle, of the University of Durham, in an article in the *New York Lancet*, gives three great principles to be observed in the treatment of eclampsia: 1, the purifying of the blood; 2. to control convulsions; and 3, the emptying of the uterus. The first is to be accomplished by promoting diuresis, producing purgation and diaphoresis. To meet the second principle it is necessary to allay irritability of the cerebrospinal system. Morphin in his opinion has the following advantages over other cerebrospinal depressants: 1. It controls the convulsions by allaying cerebrospinal irritability. 2. It prevents the excess of waste products from being thrown into the blood. 3. It does not weaken the patient. 4. It does not injure the child. 5. It has no effect on the kidney. 6. When the patient is under its influence labor often commences, and quickly terminates without causing more convulsions.

Dionin in Disease of the Cornea.

Dr. L. Vernies, in *Klin. Ther. Woch.*, states that he uses dionin in all corneal diseases and those of the iris and ciliary body, where it is best applied in combination with mydriatics. He uses it in solution of 5 to 10 per cent. strength. Ulcers of the cornea heal rapidly under its influence. It acts especially by increasing the flow of the lymph.

Treatment of Gout.

In painful finger joints due to chronic gout, the following is recommended by Dr. Solis Cohen:

℞.	Olei gaultheriæ		
	Guaiacoli, āā	m. xx	1 33
	Camphoræ		
	Menthol, āā	gr. xv	1
	Ol. caryophylli	m. v.	33
	Glycerini		
	Petrolati		
	Lani, āā	℥i	4

M. Sig.: Apply locally and rub in thoroughly.

He states that much larger quantities of the active ingredients, even up to saturation, may be used.

As a Tonic and Eliminant in Infectious Diseases of Children.

℞.	Ferri et ammon. citratis	℥ss	16
	Tinct. nucis vom.	℥ss	2
	Sol. potass. arsenitis	℥ss	2
	Tinct. calumbæ	℥ss	16
	Syr. limonis	℥i	32
	Aquæ, q. s. ad	℥iv	128

M. Sig.: One teaspoonful in water after each meal.

Glonoin in Angina Pectoris.

H. E. Lewis, in *Merck's Archives*, recommends glonoin in spasmodic contraction of muscular tissue. In angina pectoris it is recommended as follows:

℞.	Spts. glonoini		
	Spts. chloroformi, āā	℥ss	2
	Tinct. capsici	℥i	4
	Aq. menth. pip. q. s. ad	℥i	32

M. Sig.: A teaspoonful every four hours, with a repetition of the dose immediately at the onset of the attack.

Murrel advises that the solutions of glonoin be warmed at least to the temperature of the body as it is thus more readily absorbed.

Hyperemesis of Pregnancy.

J. W. McLane, in *Med. News*, recommends complete rest in bed; have all the food given by the nurse, and keep the patient's mind away from the stomach. He recommends as a diet, peptonized milk, beef tea, preferably unsalted eggs, and raw oysters. An enema containing a few drops of tincture of opium, and one teaspoonful of brandy is good. Examine the uterus

and if it is anteverted or retroverted or bound down with adhesions, tampon with gauze impregnated with boric acid, vaselin and glycerin. If the vomiting can not be stopped anesthetize, scoop out the ovum with the finger, curette, douche and insert a gauze drain.

Sciatica.

In sciatica, neuralgic headache and intercostal neuralgia the following is recommended as a local application:

R.	Olei gaultheriæ		
	Guaiacol, āā	m. xv	1
	Menthol	gr. x	66
	Lanolini	3ii	8

M. Place in a tin tube. Sig.: A small quantity about the size of a pea to be well rubbed in over seat of pain, night and morning.

Drugs in Heart Disease.

H. A. Hare, in *Ther. Gazette*, praises very highly the value of digitalis and massa hydrargyri in certain forms of heart disease. When the heart becomes incompetent as evidenced by enlargement and tenderness of the liver, the hepatic circulation is necessarily retarded. The administration of massa hydrargyri relieves this congestion and increases the activity of the liver. Hare states that it is probable that the relief of liver engorgement is accompanied by an increased ability to destroy toxic material in the circulation or in the elimination through the bile. It is also known that mercury increases renal elimination, consequently the stasis in the portal circulation is relieved, which in turn lessens the work thrown upon the heart. In some cases, he states, digitalis fails to produce proper results till mercury in this form is freely given.

To Remove Freckles. (Lentigo).

The following lotion is recommended by *Pratico del Med.*

R.	Hydrarg. chlorid, corros.	gr. xv	1
	Zinci sulphatis	gr. xxx	2
	Aq. plumbi	3ss	2
	Aq. rosæ	℥viii	256

M. Sig.: Apply locally night and morning.

Treatment of Warts.

The following has been recommended, in the removal of warts, by the *New York Lancet*:

R.	Hydrarg. chloridi corros.	gr. v	30
	Acidi salicylici	3i	4
	Collodion q. s. ad	℥i	32

M. Sig.: Paint the application over the warts once a day. After a few applications the warts peel off.

Carcinoma of the Skin.

Unna, as noted in the *Post-Graduate*, places the Paquelin cautery in first rank as a therapeutic agent. This is generally used superficially, singeing the parts only. He states that he has observed a checking of the malignant process and the appearance of granulation tissue. He regards resorcin as second in efficiency used in an alcoholic solution of 5 per cent. strength, or in the form of a plaster. Resorcin seems to be more effective when combined with benzoic acid in same strength solution. He also recommends the following to be applied in the form of a plaster:

R.	Acidi arsenosi		
	Ext. cannabis indicæ, āā	gr. lxxv	5
	Acidi salicylici	3v	20

M. prepare on plaster mull.

He states that under the use of this application, cancerous tissue breaks down, while the healthy skin will resist for a much longer period.

Asphyxia by Drowning.

E. H. Bayley, in *Northwestern Lancet*, emphasizes the following points, stating that the success of the treatment depends upon immediate action: 1. The patient should not be carried all around town before trying to resuscitate him. 2. The body should be inverted and the head and face should be kept down so that the tongue will fall forward, permitting the water to escape from the mouth. 3. The patient should be taken to the nearest house, the clothing is to be removed, and warmth is to be applied with hot, woolen blankets, and one is to keep at work until bodily heat is fully restored. Assistants should rub the body while the blankets are being changed. 4. Artificial respiration should be begun with head down and hips elevated. 5. Stimulants—as strychnin sulphate, aromatic spirits of ammonia and coffee—are to be given. 6. When respiration and circulation have commenced, one should lay the patient on his back, occasionally rolling him from one side to the other to lessen the danger of local congestions.

Medicolegal.

City Not Liable for Negligence of Hospital Surgeon.—The Indianapolis City Hospital is maintained and operated under a statute which provides that the department of health and charities shall be under the control of three commissioners who shall be practicing physicians, who, among other things, shall have charge of the city hospital, and are authorized and directed to prepare ordinances for the efficient regulation and management of such hospital, as may seem to them desirable. In the case of Williams vs. the City of Indianapolis, the latter was sued for damages alleged to have been sustained through the negligent and unskilful treatment given a non-paying patient with a broken arm by an alleged incompetent and unskilful physician and surgeon negligently employed in the city hospital. The Appellate Court of Indiana, however, holds that there was no liability on the part of the city. It holds that the duty imposed on the board of commissioners by the statute is governmental. The board, it says, acts for the public, not as the agent of the municipality in its corporate character. Considerable reliance, the court goes on to state, was placed on a Rhode Island decision in an action that was brought by a paying patient against a hospital administered largely as a charity, where the court seems to have treated the hospital as any other corporation. But in this case the patient being averred to have been a non-paying one and the hospital being operated by the municipality, the court holds that its exemption from liability for damages rests upon broader grounds than that of a private institution operated as a charity. It also suggests that the true doctrine, upon facts parallel with those before the Rhode Island court, is that "the damages should be paid out of the pocket of the wrongdoer, and not from the trust fund."

Commenting on Failure to Make Physician Witness.—The Supreme Court of Indiana holds, in the case of Brackney vs. Fogle, that the rule that it is proper for counsel to comment upon the failure to call accessible witnesses who know, or are supposed to know, about the facts in controversy, does not apply to the failure to call a privileged witness. This was a suit to contest a will upon the ground of mental unsoundness and undue influence. During his argument to the jury, an attorney for the contestants was permitted to comment on the exclusion as a witness, upon the objection of the administrator, of the physician who had attended the testatrix in her last illness, and he commented on the right of the administrator to waive the statute, and permit the physician to testify, and to call him as a witness. Among many other things, the attorney said, in effect, that the doctor had been with the testatrix shortly before the will was executed, knew her condition, could and would have told it, and that the witness was kept from the stand to suppress the truth. The judge, who allowed this, instructed the jury that, under the law, the administrator had the legal right to object to the physician's testifying to any facts that came to his knowledge while professionally treating the testatrix, such matters being confidential; but the administrator had the right to waive objection to such testimony, and could himself call the doctor to the stand, and his failure to do so, or permit him to testify to such facts, might rightfully be commented on by counsel, and that the jury might consider the conduct of the administrator in these respects, with all the other evidence, in deter-

mining the case. The Supreme Court holds that this was reversible error.

Damages for Loss of Arm after Amputation of Fingers.—The case of Rich vs. Moore was brought to recover damages from a physician for the loss of an arm which it was alleged that, on account of his negligence, had to be amputated above the elbow some 18 days after an injury to the hand which was so severe that it was necessary to amputate the fingers, which the defendant and another physician called by him did, after which he treated the case for 5 or 6 days, when he surrendered it, refusing to consult or act with another physician then called in. Further facts are not given. But there was a verdict and judgment for the plaintiff. This latter, however, the Supreme Court of Iowa reverses for the inadvertent use of the word "plaintiff" instead of "defendant" in the clause beginning with "but" in the following part of an instruction to the jury: "To render the defendant liable, there must not only have been negligence on his part in some manner as charged, without contributory negligence of plaintiff or others caring for him, but such negligence of plaintiff, if shown, must have been the proximate cause of the injury." As the instruction read, the court says that it was erroneous, as, under the well-settled doctrine, any negligence of the plaintiff contributing to the injury complained of would defeat his recovery of damages. Another point to which the defendant took exception was to the plaintiff being permitted to prove what he had earned, per year, before his arm was taken off, and what he had earned since. This was assigned as error, on the ground that an amputation of the fingers of the hand was conceded to have been necessary, and the difference in his earning capacity should have been confined to his condition after his fingers were removed, instead of as a sound man. This objection the court, however, does not think well taken. It says that it is not always possible to produce evidence which shall meet exact conditions. The man was a farmer and farm hand. Whether he might have produced evidence tending to show what a man with the fingers of one hand gone might have earned at that work, the court does not know; but men so afflicted are not common, and the court is satisfied with the result in this respect as it thinks the verdict returned showed that the jury gave due consideration to this difference in physical perfection, although it does not state what was the amount of the verdict.

Criminal Abortion: Its Seriousness, Proof, Punishment.—The Supreme Court of Idaho says, in the case of State vs. Alcorn, that an unnatural abortion, brought about by means of drugs or instruments, violates decency, the best interests of society, the divine law, the law of nature, the criminal statutes of that state, and is not only destructive of a life unborn, but places in jeopardy the life of a human being,—the pregnant woman. Both actors, when there are two, are guilty of felony, and ought to be punished by the law, if the woman survives; and, if she does not, then the person or persons participating in the abortion should be punished. This crime is one of grave consequences to society. The law prohibits it and prescribes severe penalties. The law ought to be strictly enforced. Furthermore, in a case of this kind, the court says that it will not notice purely technical errors, which do not prejudice the substantial rights of the accused, for the purpose of reversing the verdict returned by the jury, especially where it is satisfied that substantial justice has been done. Under the statutes of Idaho, the crime of abortion may be committed prior to the quickening of the fetus, but the rule is otherwise at the common law. Then, the corpus delicti, or substance of the offense, the court holds, may be proven by declarations and circumstances, but the order in which the evidence proving the different material facts is introduced is not material. In a prosecution upon the charge of murder, where the death of the deceased is alleged to have resulted from an operation performed for the purpose of bringing about an abortion, the pregnancy of the deceased must be proven beyond reasonable doubt, but need not be demonstrated to an absolute certainty. In case of homicide resulting from an operation performed by the accused upon the body of the deceased to bring about an abortion, the declaration of the deceased, made at the time she was introduced to the accused, to the effect that she was pregnant, and which had direct reference to the contemplated transaction between the deceased and the accused, the court holds, is admissible in evidence as a part of the res gestæ, or essential circumstances of the transaction. It also holds that where an unnatural abortion is sought to be caused by the use of instruments and drugs, or either, and death results, an abortion not being necessary to save the life of the woman, such acts, under the statutes of Idaho, constitute the crime of murder in the second degree; and an instruction that such acts constitute the crime of murder in the second degree or manslaughter is erroneous.

Sufficient Evidence of Malpractice to go to Jury.—In the case of Degelau vs. Wight, brought against two physicians practicing in partnership to recover damages for the death of a woman which was alleged to have been caused by their negligent and unskilful treatment, the Supreme Court of Iowa has reversed a judgment entered in their favor on a directed verdict. The woman, who was 21 years of age when she died, had nearly seven months before that given birth to a child, and, although she was up again in a week or two, had thereafter been troubled with intermittent pains, finally consulted the defendants, and, on their advice, submitted to the operation of curettage of the uterus. As one witness put it, they said her trouble "was something of the afterbirth of the child." About an hour and a half was consumed in performing the operation, both physicians leaving about half an hour later and before the patient had recovered consciousness, or at about 11 a. m. During the day she became worse, suffered severe pain, and died at 10 o'clock in the evening. There was evidence tending to show that it was not probable that any part of the afterbirth could have remained in the womb so long, and also evidence from which a jury might have been justified in drawing the inference that no necessity existed for the operation of curettage. At a post-mortem examination the uterus was removed, and it was found to be torn to the extent of an inch or an inch and a half, so that the handle of a scalpel was passed through the hole. The membrane also gave evidence of having been scraped, there being three deep furrows about an eighth of an inch apart. The condition described was said to be sufficient to cause death, either directly or from the resulting shock. It was also shown that a tear like that made in curetting the uterus could have been discovered by the operator, and that a proper course, on its being known, would either be to sew it up, or give medicine to sustain the patient until the shock was over, and then permit nature to repair the wound. The foregoing was the evidence most favorable to the plaintiff, and without wishing to be understood as expressing an opinion as to its weight, nor as suggesting the conclusion that a jury should deduce from it, the Supreme Court holds that it made a case upon which a jury should pass, and that it was error to take the case from the jury, the question of negligence being one of law only when from the facts all reasonable men must draw the same conclusion. That none but the organs in the abdominal cavity were inspected at the autopsy, and none of the physicians examined as witnesses attempted to say that no other cause of death existed, the court holds, affected only the weight of their testimony.

Current Medical Literature

Titles marked with an asterisk (*) are noted below.

New York Medical Journal, June 22.

1 *Syphilitic Fever, with a Report of Three Cases. Thomas B. Futcher.
2 *The Evolution of the Ophthalmoscope and What It Has Done for Medicine. Samuel Theobald.
3 An Introduction to the Psychological Study of Backward Children. William B. Noyes.
4 *Inguinal Bubo as a Complication of Malarial Fever. A. C Smith.

Medical News (N. Y.), June 22.

5 *Psychic Epilepsy, with the Report of a Case. J. W. Courtney.
6 *The Medical Expert Evidence in the Case of the Davis Belle-

vue Hospital Homicide. R. L. Pritchard.
7 *Obstipation. Sterling B. Taylor.
8 *A Study of Some Complications and Sequelæ of Typhoid Fever. (Concluded.) H. A. Hare and H. R. M. Landis.

Medical Record (N. Y.), June 22.

9 *Hernia of the Urinary Bladder. W. S. Cheesman.
10 *The "Nauheim Treatment." H. Newton Heineman.
11 *On Nephrorrhaphy with Flap Fixation. Arnold Sturmdorf.

Cincinnati Lancet-Clinic, June 22.

12 *Intra-ligamentous Ovarian Cysts: Diagnosis and Treatment. Chauncey D. Palmer.
13 Mathematics in Medicine. H. H. Spiers.

American Medicine (Philadelphia), June 22.

14 *The Treatment of Abdominal Aortic Aneurysm by a Preliminary Exploratory Celiotomy and Peritoneal Exclusion of the Sac, followed at a Later Sitting by Wiring and Electrolysis, with the Report of Two Hitherto Unpublished Cases. (To be concluded.) Rudolph Matas.
15 *The So-called Traumatic Neuroses. Harold N. Moyer.
16 *Resection of Superior Sympathetic Cervical Ganglion for Non-inflammatory Glaucoma. Joseph Mullen.
17 *The Bacteriologic Examination of Clinical Thermometers. Randle C. Rosenberger.
18 *Atypical Pneumonia and Pulmonary Tuberculosis. W. H. Bergtold.
19 *Electrolysis in Diseases of the Skin. F. E. Wisecup.
20 *The Nervous Exhaustion Due to West Point Training. Charles E. Woodruff.

Philadelphia Medical Journal, June 22.

21 A New Hemorrhoidal Clamp. G. Milton Linticum.
22 A Needle for Silver Wire. L. J. Y. Gemella.
23 *Further Notes on a Case of Pernicious Anemia Reported at the Meeting of the Association of American Physicians in 1900; with Remarks on the Diagnosis of the Disease. Frederick P. Henry.
24 A Case of Severe Anemia, with Changes in the Spinal Cord. Wm. E. Hughes and William G. Spiller.
25 The Teaching of Chemical Pathology. Alonzo E. Taylor.
26 *Theoretical and Practical Considerations on the Treatment of Jacksonian Epilepsy by Operation; with the Report of Five Cases. (Conclusion.) James J. Putnam.
27 *What I Have Learned from 161 Operations for the Relief of Senile Hypertrophy of the Prostate Gland. (Conclusion.) Orville Horwitz.

Boston Medical and Surgical Journal, June 20.

28 A Study of the Food Consumed and Digested by Four Members of the Harvard University Boat Crew in June, 1900. (To be continued.) W. O. Atwater and F. G. Benedict.
29 *Puerperal Insanity. Edward B. Lane.
30 *The Home Treatment of Tuberculosis vs. the Climatic Treatment. Edward O. Otis.
31 A Case of Marked Cyanosis, Difficult to Explain. Sylvester F. McKeen.

American Practitioner and News (Louisville), May 1.

32 Arthritis Deformans and Its Relation to Some Diseases Due to Perverted Metabolism. Joseph W. Irwin.
33 Lupus Vulgaris. John E. Hays.
34 Arsenauro in the Treatment of Some Nerve Diseases, with Report of Cases. J. J. Wakefield.
35 Salpingo-oophorectomy for Dysmenorrhea and Neurasthenia of Ovarian Origin. J. T. Green.
36 The Electro-magnet in Ophthalmic Surgery. Yataro Ota.

Pediatrics (N. Y.), June 1.

37 *The Importance of the Early Recognition of Ear Troubles in Children. MacLeod Yearsley.
38 *The Therapeutic Value of Thermol. Edwin Rosenthal.
39 A Case of Intussusception. S. Kunz.
40 A Case of Infantile Scurvy with Recovery. I. A. Abt.

Medical Fortnightly (St. Louis), June 10.

41 Surgery at the Illinois State Medical Society. Carl E. Black.
42 An Inquiry into the Action of Heroin Hydrochlorid. C. D. Center.
43 Diagnosis in Diseases of Infancy. John Zahorsky.
44 Diseases of the Lungs and Pleura. Albert Abrams.

Cleveland Journal of Medicine, June.

45 *Report of Two Cases of Angiosarcoma of the Brain. Roger G. Perkins.
46 *The Morbid Anatomy of Epilepsy, being a Summary of the Results in 130 Autopsies. A. P. Ohlmacher.
47 Thirty-three Consecutive Abdominal Sections in General Practice. A. E. Warren.
48 A Case of Double Vagina and Uterus. Hunter Robb.
49 Gallstones. J. Robert Caywood.
50 Gallstones. Edwin Ricketts.
51 *Our Ideals in Appendicitis. N. Stone Scott.
52 A Case of Congenital Dislocation of the Hip with Unusual Family History. W. G. Stern.

The Post-Graduate (N. Y.), June.

53 The Treatment of Pneumonia. Leonard Weber.
54 A Practitioner's Treatment of Inflammatory and Ulcerative Conditions of the Larynx. H. Beaman Douglass.
55 Materials and Technique of Plaster-of-Paris Jacket. Dexter D. Ashley.
56 Report of Clinic. Dr. Wilkin.

Fort Wayne Medical Journal-Magazine, May.

57 Tetanus. G. W. Thompson.
58 Microscopic Aids in the Diagnosis and Treatment of Pneumonia. D. J. Loring.

Archives of Pediatrics, June.

59 *Congenital Occlusion of the Duodenum. Louise Cordes.
60 *Syphilis of the Liver with Large Gummata in Late Childhood. David L. Edsall.
61 A Report of Two Cases of Cancrum Oris. William S. Bainbridge.
62 Duhring's Disease in Childhood. William S. Gottheil.
63 Abscess of the Ethmoid and the Antrum of Highmore. J. Morrison Ray.

Canadian Practitioner and Review (Toronto), June.

64 Notes on Eclampsia. K. C. McIlwraith.
65 Medical Aspects of Cancer of the Breast. William Osler.
66 New Observations on the Treatment of Anemia and Chlorosis. F. Sontag.

Chicago Medical Recorder, June.

67 Further Observations on Rapid Osteoclasis for the Correction of Rachitic Deformities of the Legs. Wallace Blanchard.
68 Operation for Postmenopausal, Complete Prolapse of the Uterus; Operation for Extensive Vesicovaginal Fistula. J. Clarence Webster.
69 Abdominal Colopexy for Prolapse of the Rectum. John B. Murphy.
70 Goiter Complicated by Stenosis of the Trachea. William E. Morgan.
71 Gastrostomy. E. Wyllys Andrews.
72 Two Cases of Weak Heart. George W. Webster.
73 Medical Cases. James B. Herrick.

Journal of Nervous and Mental Disease (Nyack, N. Y.), June.

74 *A Case of Bullet Wound in the Spinal Cord: Operation Three Years Later. Joseph Sailer.
75 *The Rationale of Subjective Healing. Smith Baker.
76 An Anomalous Case of Paralysis and Dystrophy of Muscles Probably Dependent upon Both Neutral and Spinal Lesions. (Not Primary Neurotic Atrophy.) F. X. Dercum.
77 Notes of a Remarkable Case of Insomnia and Its Treatment. John E. Beebe.

Kansas City Medical Record, June.

78 Meningitis. H. O. Hanawalt.
79 Estivo-autumnal Fever. Calvin Atkins.

Medical Sentinel (Portland, Ore.), June.

80 Reciprocity Between State Medical and Licensing Boards. C. E. Worthington.
81 Report of Case of Dynamic Ileus. L. P. McCalla.
82 Post-Graduate Study in London. Warren Brown.

Annals of Otology, Rhinology and Laryngology (St. Louis), May.

83 *A Consideration of the Pathology of the So-called Neurotic Inflammations of the Mouth. J. L. Goodale.
84 The Etiology of Malignant Tumors. C. Ziem.
85 Laryngeal Disturbances in the Diseases of the Central Nervous System with Special Consideration of Laryngeal Disturbances in Tabes Dorsalis. Dr. Johann Sendziak.

Medical Bulletin (Philadelphia), June.

86 A Clinical Lecture on Three Cases of Malarial Fever; Two of the Tertian and One of the Quotidian Type. J. M. Anders.
87 Removal of Carcinomatous Breast. William L. Rodman.
88 Some Anemic Conditions. Frank D. Newton.

Medical Standard (Chicago), June.

89 Appendicitis and Its Treatment. A. J. Ochsner.
90 A Dermatological Clinic. David Lieberthal.
91 Drug Habits and Their Treatment. T. D. Crothers.
92 Differential Diagnosis of Infectious Processes in the Right Iliac Fossa. Valdemar Pleth.
93 Adaptation of Apothecaries' Weights and Measures to the Metric System. C. S. N. Hallberg.

Annals of Gynecology and Pediatry (Boston), June.

94 *Malignant Disease of the Breast. (Concluded.) J. Collins Warren.

95 Pregnancy and Tuberculosis. (Concluded.) M. Samuel Bernheim.
96 Salpingitis. Henry Matthey.

Medical Summary (Philadelphia), June.

97 Practical Experience. J. S. Leachman.
98 Morphin Habit as a Nervous Disease. C. E. Patterson.
99 Vaccination. S. A. Buchanan.
100 Justice. C. Fletcher Souder.
101 Treatment of Hypertrophied Prostate Gland. H. B. Stanley.
102 Dilated Stomach. M. G. Price.

Memphis Medical Monthly, June.

103 The Work and the Reward of the Physician. James L. Minor.
104 *Have We a Continued Fever Which Is Neither Typhoid Nor Malarial? T. J. Happel.
105 The Limitations of Medicine. G. W. Penn.
106 Unusual Case of Bright's Disease—Recovery. D. A. Walker.
107 Burns and Their Treatment. Allen E. Cox.
108 Hospital Cars for Railway Service. G. B. Thornton.

Mississippi Medical Record (Vicksburg), June.

109 A Degeneration of the Maternal Obligation. J. C. Weaver.
110 Ulcers of the Leg. J. W. Hunnicutt.

Vermont Medical Monthly (Burlington), May 25.

111 Hemianopia. A. T. M. Chisholm.
112 The Relief of Pain. Edmond J. Melville.

Bulletin of the Johns Hopkins Hospital (Baltimore), April-May-June.

113 On the Study of Anatomy. Lewellys F. Barker.
114 *On the Occurrence of Tails in Man, with a Description of the Case Reported by Dr. Watson. Ross Granville Harrison.
115 Development of the Pig's Intestine. John Bruce MacCallum.
116 *Bilateral Relations of the Cerebral Cortex. E. Lindon Mellus.
117 A New Carbon-dioxid Freezing Microtome. Charles Russell Bardeen.
118 Notes on Cervical Ribs. Clinton E. Brush, Jr.
119 On the Preservation of Anatomical Material in America by Means of Cold Storage. Abram T. Kerr.
120 *On the Development of the Nuclei Pontis During the Second and Third Months of Embryonic Life. Margaret Long.
121 *The Architecture of the Gall-bladder. Mervin T. Sudler.
122 Remarkable Cases of Hereditary Anchyloses, or Absence of Various Phalangeal Joints, with Defects of the Little and Ring Fingers. George Walker.
123 *Note on the Basement Membrane of the Tubules of the Kidney. Franklin P. Mall.
124 A Composite Study of the Axillary Artery in Man. J. M. Hitzrot.
125 On the Origin of the Lymphatics in the Liver. Franklin P. Mall.
126 Born's Method of Reconstruction by Means of Wax Plates as Used in the Anatomical Laboratory of the Johns Hopkins University. Charles R. Bardeen.
127 Model of the Nucleus Dentatus of the Cerebellum and Its Accessory Nuclei. Harry A. Fowler.
128 Use of the Material of the Dissecting Room for Scientific Purposes. Charles R. Bardeen.
129 On the Development of the Human Diaphragm. Franklin P. Mall.
130 Observations on the Pectoralis Major Muscle in Man. Warren H. Lewis.
131 On the Blood-Vessels of the Human Lymphatic Gland. W. J. Calvert.
132 Normal Menstruation and Some of the Factors Modifying It. Clelia D. Mosher.
133 Retrojection of Bile into the Pancreas, a Cause of Acute Hemorrhagic Pancreatitis. W. S. Halsted.
134 The Etiology of Acute Hemorrhagic Pancreatitis. Eugene L. Opie.

Southern Illinois Journal of Medicine and Surgery (Metropolis), May.

135 The Good of the Association, and the Journal. A. C. Ragsdale.
136 Examination of Urine as a Method of Diagnosis. P. S. Waters.

Buffalo Medical Journal, June.

137 The Conservative Treatment of Injuries of the Extremities. Chauncey Pelton Smith.
138 Skin Grafting. F. B. Rasbach.
139 *The Making and Fitting of Spectacles and Eyeglasses from the Optician's Standpoint. P. H. Meyer.
140 Fractures of the Nose. Marshall Clinton.
141 *The Pathology of Asthma. G. N. Jack.
142 Severe Melancholia Consequent upon Pelvic Disease. L. G. Hanley.
143 Complicated Hysteromyomectomy. Chas. Banta.
144 Hypertrophic Rhinitis Treated Successfully with Adrenalin Chlorid Solution. Franklin W. Bock

Texas Medical News (Austin), April.

145 Public Hygiene—State Medicine. R. H. Harrison.
146 Circular Enterorrhaphy. F. W. Kirkham.
147 Post-operative Treatment of the Rectum. O. L. Norsworthy.
148 Location of Foreign Body in Eye with X-rays as Used in the Royal Ophthalmic Hospital, London, England. E. P. Daviss.
149 Intestinal Auto-intoxication—Report of Cases. R. W. Baird.

May.

150 Jury Trials of Insane. Marvin L. Graves.
151 Normal Salt Solution. A. C. Scott.
152 Intestinal Colic. T. J. Ratliff.

Texas Medical Journal (Austin), June.

153 Pelvic Abscess. R. M. Dunn.

International Journal of Surgery (N.Y.), June.

154 *Practical Suggestions upon the Treatment of Rectal Diseases. James P. Tuttle.
155 *Briefs on the Surgery of the Genito-urinary Organs. G. Frank Lydston.
156 Nose and Throat Work for the General Practitioner. (Continued.) George L. Richards.
157 Necrosis of the Cranial Bones—With an Illustrative Case. W. King.
158 Regional Minor Surgery. (Continued.) George G. Van Schaick.
159 Acute Ileus Due to Chronic Obstruction at the Splenic Flexure. Operations. Recovery. Howard Lilienthal.
160 Exostosis Preventing Flexion of the Knee—Appendicitis. Wm. L. Rodman.

Alabama Medical Journal (Birmingham), May.

161 Chronic Interstitial Nephritis—Its Diagnosis and Treatment. E. D. Bondurant.
162 The Pernicious Vomiting of Pregnancy. M. B. Cameron.
163 Fevers. M. C. Schooler.
164 Veratrum Viride. A. E. Meadow.
165 Acute Lobar Pneumonia. J. U. Ray.

New England Medical Fortnightly (Danbury, Conn.), June.

166 The Benefits of Hypnotics in Cases of Pulmonary Tuberculosis. John L. Hughes.
167 My Last Year's Experience with La Grippe. J. D. Hopper.
168 On the Use of Thialion in the Treatment of Alcoholic Gastric Catarrh. Buchanan Burr.
169 A Striking Analogy Between the Physiology of Animals and That of Plants. Edward D. McDaniel.
170 The Medical Treatment During the Adolescent Period. Edwin Rosenthal.
171 The Necessity of a More Perfect Aeration—Preliminary Statement. H. H. Spiers.

AMERICAN.

1. **Syphilitic Fever.**—After reporting three cases illustrating various points in regard to the condition, Futcher sums up the following as to be emphasized in this connection: 1. In all cases of fever of obscure origin the possibility of it being syphilitic should be borne in mind. 2. Experience has shown that physicians of reputation, as well as those of limited experience, are prone to mistake the condition for one of the acute specific fevers. 3. The affections for which syphilitic fever is most often mistaken are malaria, typhoid fever, tuberculosis, sepsis, and occasionally rheumatic fever. 4. The fever may occur as early as four weeks previous to the appearance of the secondary skin eruption, or, what is of greater importance, late in the disease after tertiary manifestations have existed probably for years. 5. The fever may be continuous, remittent, or intermittent. The remittent type is regarded as the most frequent form in the fever of invasion. The fever is often associated with chills and sweating. 6. Careful examinations of the long bones and viscera for evidences of tertiary lues should be made in all cases of fever of obscure origin.

2. **The Ophthalmoscope.**—The history of the ophthalmoscope is given very thoroughly by Theobald; he gives full credit to Babbage, who is not usually recognized by medical writers as the originator of the ophthalmoscope. He says that while Helmholtz deserves a certain amount of credit, that which was essential in his ophthalmoscope was not wholly original, and that which was original was not only distinctly not essential, but was the outcome of a misconception—a fortunate misconception as it turned out—upon his part. Within a few months of the announcement, the method of illuminating the eye which he suggested was to a great extent put aside for that of the ill-starred Mr. Babbage. Other names connected with the early history of the ophthalmoscope are mentioned, such as Spencer Wells, etc. The importance to ophthalmology of the instrument, he thinks, is best illustrated by a comparison

to a ship without a rudder, compass and sextant, and not only ophthalmology but neurology and other departments of medicine are benefited by it.

4. **Malarial Buboes.**—Smith reports five cases of inguinal buboes as complications of malarial fever, giving temperature charts and daily records. He has observed other cases and calls attention to the phenomenon as a matter of much importance and occurring without the suspicion of venereal infection and clearly dependent upon the fever. In conclusion he remarks on the reported existence in Cebu, P. I., of many cases of mild fever with glandular enlargement, and suggests that it will be interesting to know what these cases prove to be on investigation.

5. **Psychic Epilepsy.**—Courtney gives a description of the phenomena of psychic epileptic attacks and concludes that psychoses of epilepsy have very definite and immediate associations with other and irrefragible manifestations of the disease, that the plea of irresponsibility for criminal acts alleged to have been committed while the individual was suffering from epilepsy should be considered invalid unless other manifestations can be adduced, and that vague and ill-defined convulsions which date back to infancy do not constitute such other manifestations. He reports a case at some length as illustrating the intellectual petit mal. It was traumatic in its origin and presented the features of the "absences" of consciousness, amnesia and automatic acts.

6. **Medical Expert Evidence.**—The special case of the Bellevue Hospital attendant who was tried for murder of a patient and the differences of medical opinion adduced in the trial form the text of Pritchard's article. The charges made against the medical expert testimony generally he thinks are harsh and he criticizes certain points in the management of the case by the prosecution. He says medical expert testimony is more often defective from the manner of its presentation than from an assumed yielding of expert witnesses to whatever opinion is desired of him. Medical expert testimony has the indifferent witness who makes the possibilities of medical science his excuse for almost any opinion and such should be branded by the medical profession as cankers eating into their professional body. This last class of medical expert evidence is not found, however, in a trial of great public interest where the medical witnesses are the foremost members of the medical profession.

7. See abstract in THE JOURNAL, XXXV, p. 1048.

8. **Typhoid Fever.**—Hare and Landis conclude their article, reviewing the respiratory complications, the temperature in the well-developed stage, the skin lesions, eruptions, genito-urinary symptoms in the developed disease and the symptoms on the side of nervous system and alimentary canal. Typhoid without intestinal lesions is mentioned, as are also the circulatory and blood changes.

9. **Hernia of the Bladder.**—Cheesman commences his paper with a report of cases, then passes to the history of the condition, its anatomical conditions, etiology and treatment. He concludes his paper with the following conclusions: 1. That the principal cause of bladder hernia is direct traction exercised through the peritoneal coat by the weight of the hernial mass, or by pull on the sac during ligation in operations for radical cure. 2. In one-sixth of the cases symptoms occur sufficient to arouse suspicion, sometimes amounting to certainty, of the existence of the abnormality. 3. In about one-fourth of the cases it may be possible during operation to recognize the bladder and avoid injuring it; and after one hernial sac has been found, any structure resembling a second should be regarded as bladder, till proved otherwise. 4. When the bladder is wounded, the best procedure is immediate suture by two layers of catgut, and closure of the hernial wound by Bassini's method; a small drain only being left leading to the bladder suture line. The bladder wall, when thinned, may be freely resected preparatory to closure. The catheter *à demeure* is not essential to primary union of wounds thus closed. 5. Urinary fistula nearly always closes spontaneously. 6. Injuries of the bladder have been directly responsible for death in only 10 per cent. of the hernia cases in which they occurred.

10. **The Nauheim Treatment.**—Heineman is a strong advocate of the Nauheim treatment, which he finds beneficial in a very large proportion of cases. He describes the methods and the dietary advised, and gives results. He thinks it is indicated in rheumatism, gout, inflammatory exudates, functional and incipient organic spinal disorders, spinal congestion, neurasthenia and early stage of locomotor ataxia, chorea, sciatica, and certain forms of neuritis; in circulatory disorders; in the conditions produced by chlorosis, hemophilia, and Barlow's disease, early arteriosclerosis, and aneurysm only in its incipiency; also in varicose condition of the veins; in all vasomotor disturbances. In cardiac diseases, it is indicated in myocarditis, fatty heart and all forms of loss of compensation, whether dependent upon muscular changes or valvular disease; also in angina pectoris and all forms of functional cardiac disorder. Its contraindications are Bright's disease, advanced aneurysm, and serious cases of advanced arteriosclerosis in which only with the utmost conservatism and watchfulness can good results be obtained and justify treatment. He cautions against too rapidly increasing the treatment, and remarks that in selecting the character of the bath and its temperature it should be kept clearly in mind that cool baths produce different physiologic effects from warm baths. Experience with every given case will have to be the guide to treatment.

11. **Nephrorrhaphy.**—The method here described by Sturmdorf and the case reported is the same as Edebohls' method as published in his article on movable kidney in the *American Journal of Obstetrics* in 1895, as far as incision and ablation of the tissue is concerned. After that the formation of the flaps is made in the following manner: "The kidney was pushed as near to the surface as possible, and steadied there by pressure exerted through the abdominal wall by the hand of an assistant. The capsula propria was incised longitudinally, exactly in the median line to within about three-fourths of an inch from either pole. A pair of closed curved, blunt-pointed scissors was introduced beneath this capsular incision, and the capsule was carefully separated from the kidney substance for an area corresponding to the longitudinal capsular incision in length and to the lateral borders of the kidney in width. The free capsule was now raised by mouse-tooth forceps; two flaps were formed with blunt-pointed scissors by slitting the capsule laterally at each end of the longitudinal incision, as shown in the diagram. The flaps were secured in the grasp of T-shaped forceps, while two silkworm retention sutures, equidistant from each other and from either pole of the kidney, were passed through skin, superficial fat, the tendons of the abdominal muscles, the cut and trimmed edges of the perirenal fatty capsule, the fibrous capsular flaps, and the parenchyma of the kidney, at a depth of about three-fourths of an inch from its surface, and left untied for the time being. The object of these sutures was not only to aid in relieving tension but to obliterate any possible hollow spaces, thus obviating the necessity for drainage, and at the same time securing firm coaptation of broader surfaces for subsequent cicatricial union. Longitudinal slits, corresponding in location and length to the position and width of the fibrous capsular flaps, were next made through the adjacent muscular tissue, and the flaps drawn through these slits were secured in place by a running suture of fine chromicized catgut. Three interrupted sutures of No. 3 chromicized gut were next passed so as to embrace muscle and kidney substance at a level with and equidistant from the above-mentioned silkworm sutures, and tied. The final suture included skin, superficial fat, and fascia, after which the silkworm sutures, originally left hanging loose, were drawn taut by means of shot and plate. Primary union occurred, the removal of the silkworm sutures being effected on the eighth day."

12. See abstract in THE JOURNAL of June 8, p. 1649.

14. **Moore-Corradi Method.**—The essential features of this method as stated in the article consist in: 1. A thorough exploration of the tumor by celiotomy, which permits a recognition of the approximate anatomic seat and relations and

furnishes valuable information as to its characteristics—an advantage not afforded in thoracic aneurysm. 2. The safe exposure and even permanent isolation of the point of attack in the most accessible part of the tumor by the formation of adhesions between the sac and abdominal wall, diminishing the shock and liability to perineal contamination. 3. The introduction at a second sitting after adhesions have formed and the sac becomes extraperitoneal of a highly drawn fine snarled silver wire, which should not exceed a No. 28 gauge (0.0085 inch) in diameter. Sterling silver will meet all the indications. 3. The wire should be fed or carried into the aneurysmal sac through a fine and carefully insulated trocar or cannula (shellac, celluloid, or rubber being used as the insulating agents, and the caliber of the canula not exceeding a No. 2 Dieulafoy aspirating needle). 5. The wire should be tested, first to determine the following points: That it will coil in large irregular loops so as to be distributed over the widest possible surface. That it will not form short continuous spirals with such spring and force as to cause injurious pressure on the aneurysmal walls, or, after finding its way into the aorta through a large orifice spring as it were, into the heart itself. It is important for the quantity of wire used to be adjusted to the size of the aneurysm so that retraction after coagulation may not be interfered with by its resistance. As a rule, 10 ft. will suffice for the average aneurysm, though larger quantities are advised in certain cases. 6. The electric current should be furnished by a galvanic battery with a positive pole attached to the wire, and the negative electrode well covered with a wet cloth, to the back. A milliampere meter should be connected with the circuit, to show the strength of the current, which should not exceed 70 milliamperes, for fear of caustic effects. The intensity of the current and the duration may vary within wide limits corresponding to the condition of the patient and the effect upon the tumor. In his case reported, the sitting was prolonged four hours and twenty minutes without appreciably bad effects after the sac had been rendered extraperitoneal. 7. The coincident administration of gelatin (3 per cent.) in decinormal saline solution (7 per cent. salt) in 6 or 8 ounce doses by hypodermoclysis, as suggested by Lancereaux, may be a useful adjuvant to rest, diet, and other general measures. The question whether this method is applicable to all forms or only special anatomical conditions is raised and Matas concludes that it is evident that there may be a comparatively small percentage of cases favorable and another much larger group not amenable to this procedure and where it is contraindicated.

15. **Traumatic Neuroses.**—Moyer concludes his paper by suggesting the following points for discussion: That concussion neurosis, in all its various appellations, is an unfortunate and misleading term; that clearer understanding of functional nervous troubles renders such a term unnecessary; that pain and tenderness of the spine is rarely an evidence of change in the cord, but is usually due to fatigue of the spinal muscles, or sprains and concussions of the column; that most of the symptoms of spinal concussion, as the term is commonly used, are cerebral in origin, and that a correct diagnosis and prognosis may usually be reached by analyzing all such cases after the same manner that we do functional nervous troubles having their origin in non-traumatic causes.

16. **Sympathetic Resection in Glaucoma.**—After mentioning the opinions *pro* and *contra* and methods of performing the operation, Mullen reports a case of excision of the sclerotic superior cervical ganglion for glaucoma. He puts it on record as agreeing with one reported by Panas in being followed by declining vision and, therefore, as showing that resection of the sympathetic in glaucoma does not always produce permanent curative results.

17. **Clinical Thermometers.**—Rosenberger has examined the clinical thermometer after ordinary cleansing, for bacterial contamination in various diseases, indigestion, gout, measles, scarlet fever, tuberculosis, diphtheria and bronchitis, and sums up his results in the following conclusions: 1. It is possible for the thermometer to be laden with the usual flora of the oral cavity. 2. Such bacteria may retain their capability of growth for an indefinite time, at least 2 months, as shown by the above experiments. 3. Many pathogenic bacteria possess similar capabilities, and it is not unreasonable to assume, although the above experiments are not conclusive upon this point, that transmission of bacterial disease by the thermometer is possible. 4. Thermometers are easily disinfected. 5. Where possible each patient should be possessed of a thermometer, as much his own property, and as sacred to his own use, as his toothbrush. 6. Where for reasons of economy or otherwise it is impossible to carry out the recommendations expressed in conclusion 5, the thermometer should be disinfected before and after using. 7. The custom now prevalent in the hospitals of keeping thermometers in disinfecting solutions is to be commended.

18. **Atypical Pneumonia and Phthisis.**—The importance of an early diagnosis in phthisis is considered, and the statistics as regards the antecedents of pneumonia in this disease discussed. Bergtold believes there are many cases occurring that are diagnosed pneumonia and recognized as tuberculosis only after the malady has declared itself beyond the aid of medicine. He emphasizes the point of being suspicious of any atypical pneumonia, not that he considers all such cases tuberculous, but believes that they are under suspicion. He thinks a more thorough examination of clinical histories and literature would show a larger percentage of atypical pneumonias previous to tuberculosis than is indicated by the data he has given.

19. **Electrolysis in Skin Diseases.**—Wisecup describes the methods employed by him for removal of superfluous hair and other conditions. On account of the variations of individual resistance he does not think the milliampere meter necessary, and advises the use of the smallest possible needle, not too sharp at the point; for the other electrode he allows the patient to hold his fingers in a cup of water, connected with the other pole. The rule he follows is to insert the needle about one-fourth inch into the average hair follicle, but a smaller distance for smaller hairs. Aim to have the needle come in contact with the hair bulb, which can be told by the slight resistance met. Leave the needle inserted until a white froth bubbles around it, but there is danger of leaving it too long and a scab or scar forming. Use preferably a straight needle, as small as possible, without a bulb. Among the diseases which he has treated are nevus, though the common birthmark is unsatisfactory under this head; also moles, cavernous nevus, dilated vessels, cicatricial scar tissue, xanthoma and blackheads.

20. **West Point Neurasthenia.**—Woodruff criticises the course followed at West Point as tending to exhaust the student and to produce neurasthenic conditions in after-service. He remarks that neurasthenia is recognized in the United States as a military disease. The work is three times as much as the human brain can do. The academy must abolish the unwholesome system of rejecting the cadets, who, though very able, are not possessed of an unwholesome and abnormal brightness and quickness. He thinks by retaining them and by shortening the course the academy could supply three times the number of efficient officers it now does. Congressmen could make appointments every two years without increase in the number of cadets.

23.—See abstract in THE JOURNAL of May 11, p. 1338.

26. **Jacksonian Epilepsy.**—In this conclusion of Putnam's article he points out that it is by no means certain that in Jacksonian fits there is a discharge beginning at the point corresponding to the signal symptom. The longer the time during which the seizures due to localized irritation occur, the more widely the brain as a whole becomes involved and the co-operative action of ever-widening areas of the brain may show itself almost from the outbreak. In this case the patient with traumatic or focal epilepsy probably differs but little, if at all, from patients of idiopathic epilepsy. The theory here advocated by Putnam is what he calls the "inhibition" and "formation of new habit" theory which he considers at present the best one available. He believes that the arrest of epilepsy through surgical operation is an affair primarily of inhibition, and next the establishment of a new habit, made possible by the

temporary arrest of the morbid outbreaks. He does not think it necessary to look to a focal lesion for this. The therapeutic problem is how best to secure this inhibitory action and he thinks that possibly as much good can be done by mere exposure of the brain as by incision, or perhaps more. Whatever the operation, in his opinion, it should be considered that the arrest of the symptoms is mainly useful as affording a better opportunity for bromid medication. This part should be taken up energetically. He does not consider it necessary to give the details of bromid treatment, but suggests that the Charcot method, recently recommended by Tourette, of increasing the dose for three weeks, and then dropping to the starting point, and so on, and reinforcing the treatment by every hygienic influence that can be devised, is probably as good as any method.

27. **Prostatic Hypertrophy.**—The conclusions which Horwitz deems himself justified in forming are: 1. Success following the Bottini operation depends on having perfect instruments; a good battery; the necessary skill, and the employment of a proper technique. 2. In suitable cases the Bottini is the safest and best radical operation thus far advised for the relief of prostatic hypertrophy. 3. It is often very efficacious in advanced cases of obstruction as a palliative measure, rendering catheterism easy and painless, relieving spasm; lessening the tendency to constipation, and improving the general health. 4. It is of especial service in the beginning of obstructive symptoms due to hypertrophy of the prostate gland, and may be regarded as a means of preventing catheter life. 5. It is indicated in all forms of hypertrophy except where there is a valvular formation, or where there is an enormous overgrowth of the three lobes, associated with tumor formation giving rise to a pouch, both above and below the prostate gland. 6. Where the bladder is hopelessly damaged, together with a general atheromatous condition of the blood vessels, associated with polyuria, results are negative. 7. Pyelitis is not a contraindication to a resort to the operation. 8. The character of the prostatic growth has no bearing on the results of the operation. The ligation of the internal iliac arteries for the relief of hypertrophy of the prostate gland, first recommended by Bier, has been tried by several surgeons with very unfavorable results. The benefit derived from the operation is slight, and the mortality higher than that following prostatectomy. Thus far, the results derived from angioneurectomy have been negative. I have frequently witnessed the operation of perineal prostatectomy when performed by others, and have on various occasions resorted to it, but I have found that nothing was gained beyond the temporary improvement that might naturally be expected to follow rest and drainage.

29. **Puerperal Insanity.**—Lane's article is largely an argument against the existence of puerperal insanity as a distinct disease and gives a calculation of the number of females of child-bearing age suffering from insanity and the cases of puerperal insanity reported in the Boston Insane Hospital. He finds that the number of cases among child-bearing women are rarer than among women in general at child-bearing age. It would be a good risk to insure a pregnant woman against insanity or at least against commitment for insanity. The latter part of his paper is made up of reports of cases.

30. **Home Treatment of Tuberculosis.**—The advantages of treating tuberculosis at home are that the patient avoids the risk of double radical change and makes his recovery under conditions which can be continued. The influence of familiar surroundings are also to be considered as well as the pecuniary factors. If other things were equal, which they are not, he is inclined to believe the sanatorium treatment in the Rockies or Alps, conducted on the same line as the Dettweiler at Falkenstein, and with the same stage and class of cases, would produce better results than the sanatorium in our home climates, but the majority must, if the hygienic treatment is attempted at all, undertake it near home.

37. **Ear Troubles in Children.**—Yearsley insists on the importance of early recognition of ear troubles, especially deafness, which he thinks should be suspected whenever the child is slow in learning to talk. If it passes its first two years without acquiring a few simple words, it is probably the subject of defective hearing. Pains in the ears in a child may be very variable, but it is most important to know the condition. If the general practitioner who is first to see the case, can exclude or diagnose ear disease, he will have the satisfaction of saving the patient much possible future suffering and himself much annoyance.

38. **Thermol.**—This drug, which has its chemical composition (C_{14} H_{15} No_3), is recognized by Rosenthal in combination with other drugs as an antipyretic in fevers of children. He thinks we have in it a perfectly safe antipyretic of known value with also hypnotic and analgesic powers.

45. **Angiosarcoma of the Brain.**—After first considering the indefiniteness of pathologic symptoms in cases of brain tumor, Perkins reports a case in which the diagnosis of angiosarcoma could be definitely made but in which no trace of special connections with blood vessels, either endothelial or epithelial could be made out. The diagnosis of cerebral tumor was made from the usual symptoms. The autopsy revealed a growth of the right frontal lobe without metastases, which microscopically, from the character and arrangement of tumor cells, their lack of processes, the minimal amount of stroma and sharply defined limitations from the brain substance, resembled sarcoma; the abundance of vessels throughout the mass, suggesting angiosarcoma in the absence of infiltration; lack of nerve cells, apparent absence of glia fibers, were against the diagnosis of glioma. He concludes his paper with remarks on the nomenclature of brain tumors and a brief review of the opinions of others.

46. **Epilepsy.**—The morbid anatomy of epilepsy as illustrated by 130 autopsies is discussed by Ohlmacher. The findings seem to him to justify his elsewhere expressed opinion as to the close association between this nervous symptom and the peculiar condition known as the lymphatic constitution or lymphatism. He, however, says that one must not expect to find a complete picture of lymphatism, with the persistent hyperplastic thymus, general lymphadenoid hyperplasia, and arterial hyperplasia is not to be found in these conditions, as a rule, for it occurs only in children or young adults. In older persons or those dying of wasting diseases or epileptic exhaustion the evidences of lymphatism are masked and seen only in such ineradicable features as narrowed arteries or the osseous deformities of rickets. Of 71 cases classified as idiopathic and lymphatic epileptics a goodly number proved typical examples. The predominant brain change accompanying this class of cases is a gliosis of the cerebrum taking the form of diffuse superficial cerebral gliosis either hypertrophic or atrophic or a localized sclerosis affecting certain parts, particularly the horns of Ammon and the hipocampal gyri. He is inclined to the opinion that this is in some way related to intracranial pressure and it is pretty well established that lymphatism is one of the consequences of rickets and we may come to rickets as the ultimate basis of epilepsy and allied nervous disorders. If this be the case, the problem of dealing with idiopathic epilepsy resolves itself into one of the combating infantile rickets, which is probably a nutritious and infectious disorder, preventable by proper dietary and hygienic precautions in infancy. The other class were those of infantile cerebral paralysis, which amounted to 15 per cent. of the whole, the senile epilepsy, represented by 8 cases, showing brain lesions or other localized arterial gliosis from arterial sclerosis of the cerebral arteries or foci of cerebral softening. There were 6 cases of senile epilepsy, or 5 per cent., 3 of cardiac epilepsy, connected with advanced cardiac changes which are supposed to be of direct causal relation, 2 of paralytic dementia, 1 each of alcoholic and uremic epilepsy, and 1 due to cerebral tumor, a cystic glioma of cerebrum.

51. **Ideals in Appendicitis.**—The ideals in appendicitis operations are, according to Scott, a model patient, who must be of high intelligence and in good physical condition, and an appendix with a reasonably long mesentery allowing free motion; the disease should be limited to the structures beneath the peritoneum and at the stage not yet threatening rupture. The adipose tissue of the abdominal wall should be thin and the fascia well developed. The surroundings should be such as to insure aseptic operation with all that this implies. This

is best secured in well-appointed hospitals, and a nurse that understands the ideals to be attained and the methods of achievement. Lastly, the surgeon should be a keen diagnostician and careful even to the smallest details, must have not only a good surgical ability, but added to this, dexterity and experience, so that he can perform the operation through the smallest possible incision. When all these requisites have been obtained, the traumatism of the internal parts will be limited to a mere dimple upon the head of the colon; there will be no free raw surface to form adhesions, and no necessity of absolute quiet of the intestine for the purpose of repair in aseptic operations. The only active factor to be considered is traumatism of the abdominal wall. The rapidity of the convalescence is inversely proportional to the length of the incision in the fascia, which in these favorable cases will not be over three-fourths, perhaps not over one-half inch, the elasticity of the parts being such that it is possible to introduce the finger through the dilated incision. An illustration of these ideals he gives in his own case in which he was operated upon, leaving the hospital after four and one-half days; on the sixth day he made his hospital round, transacted business and called upon his physician.

59. **Occlusion of Duodenum.**—Cordes reports a case, the fifty-seventh, according to her researches in the literature, of congenital occlusion of the duodenum, and tabulates all the cases she has found. She discusses the symptoms and says that, whatever may be said in regard to stricture of the intestine in other regions, it seems clear that volvulus and fetal peritonitis can not explain the large number of cases of occlusion of the duodenum. A number of facts, such as the repeated occurrence of this occlusion near the site of the papilla, the existence in probably more than one case of anomalies of the duct system, the absence of Brunner's glands in one case and the striking absence of any sign of disease to which the condition is traceable and other malformations than that of the duodenum in a certain number of cases, lead her to think that an error of development not yet explained may underlie this condition.

60.—This article was abstracted in THE JOURNAL of March 2, p. 592.

74. **Bullet Wound of the Spine.**—The case reported by Sailer is that of a man struck four years ago by a Mauser bullet which passed through the spinal cord in the lumbar and sacral region. There was immediate paraplegia and some years later severe fulgurant pains in the limbs. To relieve the latter, laminectomy was performed and a greatly thickened dura was incised; the operation gave great relief. Subsequently some improvement occurred and finally there was only total anesthesia and paralysis of the right limb and lower portion of the right thigh, and total anesthesia of the left foot, movement at both hip joints and left knee joint and slight improvement of the left foot and toes; total anesthesia over the sacral area, and hyperthesia of the perineal region. Sexual reflexes of the patient were only partially impaired. The interesting features of the case are the localization of injury of the spinal cord, the satisfactory results of operation three years after receipt of injury, and a curious sensory phenomenon (allochiria) shortly after the operation, while improvement was in progress. The localization in the cord is discussed at length with considerations bearing on the physiologic centers. He is certain that the anterior cornu, or the anterior root proceeding from it, was intact on the right side of the level of the first lumbar segment. The bullet probably entered about the level of the lower portion of the second lumbar segment, involving the third and fourth and possibly the fifth lumbar segments, but not the first sacral, or any of the segments below it on the right side. On the left side the first, second and third lumbar segments were certainly intact, as shown by muscular innervation, the fourth lumbar segment was partially involved, and the fifth probably totally destroyed. A study of the sensory areas also bears out this diagnosis. There is probably hemorrhage in the central portion giving rise to disassociation of sensations. The allochiria mentioned was observed thirty-nine days after operation and lasted about three days.

75. **Subjective Healing.**—Baker discusses the fads of subjective healing and suggests that we should consider the human invalid not the mere victim of a special affection, but study the entire individual in the diagnosis. A consideration of these facts shows the uselessness of wearing people out with drugs and cultivating too much dependence on them. It also shows the dangers of extreme concentration of a purely subjective order and the psychical elation which has not been given solid basis to sustain it. The "healer" often seems to make a good start in the right direction with the individual, but soon fails from lack of knowledge of physiology and pathology. Unless the body has been remedied and the mind furnished and steadied, and conduct ordered in accordance with actual needs, no cure worthy of the name can be expected from either materialist or idealist. The neurologist and psychologist should determine how far results which are now secured haphazard can be obtained by proper scientific practice. People, especially when young, should be encouraged to most sedulously cultivate bodily endurance, mental growth and freedom, and spiritual self-reliance, faith in inductive science, rather than trust in dogmatic deduction, with the hope that where now there is such readiness to develop morbid introspection and flaccidity of the mind a better state can be produced.

83. **Oral Neuroses.**—The conditions described under this head by Goodale is divided by him into the following: 1, herpes zoster; 2, herpes buccalis and lingualis; herpes facialis; erythema exsudativum multiforme, or bullosum; 3, erythyema nodosum; purpura rheumatica; 4. stomatitis neurotica chronica of Jacobi; 5, dermatitis herpetiformis of Duhring (of doubtful position); 6, pemphigus. Of the above conditions the herpes forms, erythema nodosum and purpura rheumatica are all defined clearly, but with the erythema bullosum, dermatitis herpetiformis and stomatitis neurotica chronica much confusion exists. Erythema bullosum is an angioneurotic inflammation, generally afebrile, is characterized by eruptions of one or more vesicles upon a hyperemic basis, without characteristic grouping, enlarging rapidly by peripheral extension; it forms bullæ of one or two centimeters in diameter, the contents of which are at first clear, later cloudy, and evacuated by maceration and rupture of their epithelial covering, leaving a moderately sore, but not spontaneously painful base, which heals in from one to four weeks without a scar. Dermatitis herpetiformis is a chronic, probably infectious condition characterized by more or less general eruption upon the skin and mucous membrane of lesions of multiform type, with pronounced burning or itching sensations and having a protracted course with temporary exacerbations and remissions, and little existing disturbance. Stomatitis neurotica chronica is a chronic, afebrile affection, occurring generally in neurasthenics and characterized by more or less general outbreak of bullæ upon the oral and lingual mucous membrane preceded at times by local reddening, somewhat painful, not pruritic, and various symptoms of nervous disturbance. Pemphigus is a term applied to various forms, probably infectious and distinct, but differing in their etiology and having a common characteristic eruption of clear non-purulent bullæ on an unreddened or very slightly reddened skin or mucous membrane, in regular sequence, without angiogenic form, characteristic grouping, distribution or localization, with little or no local subjective symptoms and having an acute onset and tendency to recurrence and generally attended with marked disturbance of the general health. These characteristics given above may be regarded as representative type forms, but another source of confusion is the various meaning attached to the term herpes, pemphigus, etc. The rest of his paper is given up to a description of the herpes, erythema, and other disorders of the mouth.

94. **Malignant Disease of the Breast.**—Warren's article describes the condition and Halsted's operation for its relief. As regards the results he thinks that if examination shows no recurrence within three years the cure may be regarded as certain. Taking the average results of the present time, he says, we are safe in assuming that a cure can be affected in at least 30 per cent. of the cases operated upon, though this percentage depends upon the class of cases selected. There is a type of cases which almost always may be regarded as favor-

able, that is, those which have been under observation for several months and have made no progress. In nearly all cases of cure in his experience the microscopist has given a diagnosis of scirrhus cancer. The question whether we should try a post-operative treatment to prevent recurrence is mentioned and he suggests the use of mammary extract as possibly producing a soil antagonistic to the return of the disease. He has not yet, however, enough experience to express a definite opinion as to its value. He has seen improvement in reabsorption of recurrent nodules from the use of the thyroid extract and he says, however, as regards the subcutaneous use of alcohol and pyoktanin that we should bear in mind that cancer nodules may disappear spontaneously.

104.—This article has appeared elsewhere. See abstract in THE JOURNAL of April 6, No. 79, p. 995.

114. **Human Tails.**—The reported cases of caudal appendages in man comprises a most heterogeneous class. Anything appended to the sacral or coccygeal region is described as tails. There are, however, a great many cases, Harrison says, in which the anatomical relations are such as to indicate that the growth owes its existence to the persistence of at least part of the vestigial tail found in the human embryo. The case he reports appears to be such a one. The subject generally is discussed at length and the way in which the abnormality appears is theorized out. He concludes with Keibel that while as far as outward form is concerned the embryologic tail disappears, largely as a result of growth of the extremities and gluteal region, a certain amount of regressive change takes place in the caudal appendix itself. This is evident not only in the absorption of the caudal filament but also in the reduction of all the bone structures of the vertebral portion of the tail, that is, the vertebræ, muscles, segments of spinal ganglia and blood vessels. In this tendency to reduction the resemblance between human and mammalian tails also holds. The soft or boneless tails are clearly not due to multiplication of vertebræ or to the persistence of all which are developed in the vertebræ, but, as he first suggested, are to be regarded as persistent caudal filaments.

116. **Bilateral Relation of the Cerebral Cortex.**—Mellus reports experiments made by removal of portions of the cortex in the monkey, observing the functional lesions and studying the lateral degenerative processes. The most striking feature is the large number of degenerated fibers passing from the cortical lesions over the middle line in the corpus callosum and down the internal capsule of the opposite side. With the exception of those fibers going to the superior temporal convolution of the opposite side, the fibers in this experiment all pass into the thalamus. In a few animals in which practically the same area was extirpated some of the degenerated fibers found in the internal capsule of the opposite side can be followed through the pons and medulla into the cervical region of the cord, where they disappear. From this he concludes that a vast number of the projection fibers arising in the motor cortex end in the thalamus and especially those of the area in which more or less bilateral movements are represented. These movements are mostly facial, and he thinks this has some bearing on the function of the thalamus. It has been suggested that the thalamus is the center for reflex or emotional movements, and the facts here stated may explain the play of the features as the result of emotion when voluntary movement is impossible. In many extensive lesions of the internal capsule fibers passing into the thalamus, even on the side of the lesion, might easily escape injury, even if bilateral control of the thalamus were improbable. The presence of degenerate fibers in the lateral geniculate bodies in this case is suggested to be possibly due to these having the function of voluntary inhibition of certain visual reflexes.

120. **Nuclei Pontis.**—The summary of Long's article on the development of the nuclei pontis is given as follows: "The main nucleus pontis is situated on the central surface of the rhombencephalon at the level of the pontal flexure. In the specimens the nuclei pontis are first seen on the surface and in the ventral part of the mantle layer of the lateral part of the pons Varolii. In the second embryo the nucleus pontis ventralis extends across the middle line of the rhombencephalon and the nuclei pontis dorsales are separated from its lateral part by the ventral fiber bundle. The nuclei pontis dorsales next form two solid masses, reaching almost to the middle line. They are still separated by the ventral fiber bundle from the nucleus pontis ventralis, except at extreme lateral ends, where they are continuous with each other. Next the nucleus pontis becomes a solid shell on the ventral surface cut by a small branch from the ventral fiber bundle. After the sixth month the pons consists mainly of fibers and scattered groups of cells, which increase at the expense of the dorsal part of the nuclei while a narrow ventral nucleus or cell-mass is left on the surface.

121. **The Gall-Bladder.**—Sudler's article is chiefly devoted to a description of the lymphatic and finer blood-supply of the gall-bladder, described in detail.

123. **Liver Lymphatics.**—From the observations here reported, Mall concludes that: 1. The lymphatics of the liver arise from the perilobular lymph spaces and that these communicate directly with the perivascular lymph spaces. 2. That the lymph reaches these spaces by a process of filtration through openings which are normally present in the capillary walls of the liver. Furthermore, the fluid injected into the lymphatics from the bile duct leaves the duct as it enters the lobule and is at once taken up by the lymph radicals and perilobular lymph spaces, and from them extends, as a secondary injection, to the perivascular lymph spaces, and often into the blood capillaries of the lobule. The larger lymphatics accompanying the portal vein arise between the lobules near their bases, while those accompanying the hepatic vein do not arise within the lobule but around the larger sublobular veins.

139. **Spectacles.**—This article is of interest as giving the views of an optician in regard to the fitting of spectacles. Meyer mentions the harm coming from patients trying to fit themselves, and thinks that even few physicians and oculists realize the importance of the careful filling of their prescriptions, not only as regards perfect lenses ordered, but also the making of the frames and adjusting them to the correct position before the eye. The distress produced by inaccurately adjusted lenses, he says, is unappreciated by those who have not felt it. He gives an instance of a lady who traveled 100 miles to her oculist, suffering with headache and gastric disturbance, and was completely relieved by the prescription: "Reduce the angle of the glasses 5 degrees." The fact that the glasses tilted a few degrees more than they should gave the effect probably of a cylinder in the longitudinal meridian, producing an astigmatic effect, which she did not naturally have. He says that opticians usually do not charge for adjusting glasses when they get out of shape, as it takes only a few seconds of their time, but are amply repaid in the expression of satisfaction of those that have received the benefit. He also discusses the peculiarities of the optician's patient and believes that the average tradesman in dealing with them would consider them all cranks. The skill of the optician in meeting the demands of these is the secret of his success.

141. **Asthma.**—Jack considers asthma not a disease by itself, only a symptom of an abnormal biochemical and complex pathologic process originating usually in the intestinal canal, with long-standing indigestion, toxemia, faulty absorption, metabolism producing toxemia of lymphagenous chyle that generates an unstable blood, characterized by extremely numerous and alarming paroxysmal morphologic changes, often alternating between lymphocytosis and intestinal toxemia leucocytosis, or marked anemia; the affection is accompanied anatomically by hyperplasia of the lymphatic and glandular structures and clinically by a most wretched and agonizing dyspnea. The characteristic pathologic feature of asthma is the unstableness of its blood. The main part of his article is given to describing the different forms of asthmatic conditions, such as asthmatic lymphocytosis, intestinal toxemic leucocytosis and anemia.

154. **Rectal Prolapse.**—This article describes the method of treatment of complete rectal prolapse of the first and second degrees, when the prolapse is due to alteration in the passive supports of the lower portion of the rectum. After preparing

the patient by cleaning out the bowels, syringing the parts, and asepsis, the prolapse is drawn down and measured. While it is down the semicircular incision is made midway between the anus and coccyx and carried between the muscles of the levator ani until the retrorectal space is reached. With the finger or a pair of blunt scissors the rectum is then separated from the sacrum as high up as the distance which it protrudes from the anus. With the dull curette the fatty or cellular tissues are scraped off the anterior surface of the sacrum and the prolapse then reduced. The assistant's finger carried through the anus inverts the gut, bringing it out between the incision made between the anus and sacrum to the same extent as the prolapse. While held in this position and flattened out long silkworm gut sutures are passed from its muscular walls from one side to the other, one above the other, and transversely. The only precaution necessary is to not carry them deep enough to involve the mucous membrane while introducing them. However, the external cellular tissue should be removed. The sutures are placed about one-half an inch apart until the whole protrusion is covered, the ends being left loose. After all the sutures necessary have been introduced, each end of the higher suture is threaded with a long curved needle, which is carried upward through the division between the sacrum and rectum and brought out at the highest point of this cavity through the ligaments and fascia upon one side of the sacrum. The other is dealt with in like manner, and the lower sutures in succeeding order are also carried up through the wound and brought out at lower levels until they all have been so treated. When these sutures are made taut they will carry the rectum upward and holding it in apposition with the fresh surface edges in normal position. If it can be held here until the normal tone of the muscular supports below has been restored the cure will be permanent. The sutures are brought across the sacrum over a strip of iodoform gauze laid upon the skin in order to prevent the threads cutting into it, and left for ten days or longer. After these have been thus tied, the sphincter muscle is much relaxed; it is well to pass a kangaroo tendon around the rectum just above the margin of the external sphincter, entering it in the original wound and sutured in the same wound. After this is done the wound is closed with a chromicized catgut suture for the muscles and plain catgut or silkworm for the skin. Cases operated upon in this way have been observed for three years. Five out of the nine were old and very chronic cases, one having existed for eighteen years, and with one exception there have been no symptoms of recurrence. When prolapse occurs high up in the peritoneal portions of the rectum an abdominal sigmoidopexy is advisable and he describes the operation.

155. **Resection of Vena Dorsalis Penis.**—Lydston criticises those who have claimed to have cured patients of impotence from ligation of this vessel, and thinks we would have probably better results from its resection and that this ligation as a rule has nothing to do with the brilliant results thus reported.

FOREIGN.

British Medical Journal, June 8.

Skiagraphy and Fractures: Especially in Their Medico-legal Relation. C. H. GOLDING-BIRD.—After first mentioning the dangers of the popular misuse of the X-ray, Golding-Bird discusses the subject from the surgeon's point of view. While no one will question the value of the method in the diagnosis, its use is unnecessary in the larger proportion of cases one is called upon to treat, yet there is a certain class of doubtful cases where it is most desirable. These are of two kinds, one in which, though certain of fracture, there is a doubt as to the exact locality, its direction, or perhaps its involvement of a joint. The other, where the existence of fracture is doubtful, and while this doubt may not necessarily modify the line of treatment, yet should the patient get skiagraphed on his own account, and be able to demonstrate a fracture, a suit for malpractice might arise or other embarrassment to the surgeon. Of this second class, fractures of the fibula and vertical or transverse fractures anywhere and certain forms of fractures around the hip are examples. Thus, he mentions Pott's fracture, which may occur without characteristic deformity and be diagnosed as severe sprain. A vertical fracture involving the knee-joint, a purely transverse fracture without displacement, notably in the lower end of the tibia in which the patient is still able to stand and impacted fractures of the hip are hard to be certain of. Patients, moreover, especially private ones, insist on positive knowledge of the state of their bones after injury. People have a morbid dread of bone injuries and great comfort may be given by the mere assurance that the bone is not injured. Therefore, the skiagraph may be very useful as a diagnostic evidence to the surgeon to satisfy his patient. It would be a bad thing if the diagnosis were relegated entirely to this method, and over-reliance upon it is also to be deprecated. It is only as a subsidiary generally that the skiagraph should be employed, and even then its evidence should be received with caution, and only after due interpretation by someone whose experience warrants his speaking with authority. Another use of the X-ray is to judge the results of one's handiwork and Golding-Bird thinks this is rather unreliable. The laity, and often some physicians, have a very poor idea of the actual conditions even of successful cases of simple fracture. Functional performance may be perfect and yet the X-ray show a decided deformity. The skiagraphs show that in order to satisfy esthetic requirements almost every case should be operated upon and the bones adapted by screws, wires or by some other means. If the final appeal is not to utility, but to the beauty of the bone scar, then every case must be thus treated. Before deciding upon the value of the skiagraph, we must inquire whether it really represents things as they really are, and this is a further argument against employing it as a critic of a surgeon's work. He asks, can skiagraphs show fracture where none exists, and answers, that it can. Epiphyseal lines on the long bones, the end of the ulner for example, have been mistaken for fractures. Impacted fracture of the neck of the thigh can be imitated by taking a foreshortened view. Fracture through the base of the oleeranon is simulated always where the light is directly over the bend of the elbow, the plate being posterior. The band of light is due to the rays penetrating the joint; a lateral skiagraph destroys the illusion. The acromio-clavicular joint resembles a fracture and has been mistaken for such. The appearance of gradual thickening of the bone can be produced at will. He is indebted for these and other references to the report of the American Surgical Association on the medicolegal relations of the X-ray, in the *American Journal of Medical Sciences*, for July, 1900. The second question: Is it possible to miss seeing a fracture? Yes; though rarely. Usually it is recognized by irregularity of the bone outline, but where this is not easily seen, attention to the outline of the medullary cavity generally shows it. In the ribs, especially the lower ones, because of the shadow of viscera, in the spine between the fourth and twelfth vertebræ, because of mediastinal structures, fractures may be overlooked. In the ends of very young bones centers of ossification may be mistaken for detached bone or vice versa. Anatomical depth, as in the hip, has caused trouble in recognizing fractures. The base of the skull is hardly likely to receive aid from the skiagraph. Is it possible to show fracture as still existing, though long united? He states that it is. Early callus will not show, and for the first three months the unpracticed observer might not see it distinctly. Similarly the line of union will seem to be one of separation. Can distortion be produced? Yes; by foreshortening. The appearance of gradual expansion of the bone can easily be produced by want of parallelism between the plate and limb and may be read as indicating injury. Looking at the subject from the patient's point of view the question of X-ray and fracture becomes a very serious one. It is not possible to prevent the use of the X-ray by a patient; therefore, instead of awaiting the attack, the surgeon should disarm suspicion first. He should be told, moreover, that the new photography is no measure of the cure, that the setting of fractures is not a piece of accurate cabinet-work; the people should be instructed in the uncertain indications that skiagraphy gives. The lawyer should learn that it is not a reliable

witness. It can not stand alone even for everyday practice or diagnosis, still less can its testimony be invoked for the defense or attack in a court of law.

British Medical Journal, June 15.

Hepatic Inadequacy and Its Relation to Irregular Gout. I. BURNEY YEO.—The subject of irregular gout is treated by Yeo, putting the common forms under the general head of hepatic inadequacy. The author begins by defining hepatic inadequacy, by which he means special disturbance of the function of the liver, which while stopping short of giving rise to what are generally known and accepted as diseases of the liver, lead yet to impairment of general health. In this way, he thinks, arise almost all those cases which are known as irregular gout. The uric acid theory he finds inadequate and he calls attention to the fact, as he says, that physiologic and chemical research is not always as helpful to clinical medicine as it might be, unless it is carried out in what may be called a clinical spirit without dogmatically imposing its conclusions on physiology. As instance of the failure of such research to aid the physician he calls attention to the condemnation of calomel as a cholagogue by the Edinburgh committee some years ago and shows that the practice of medicine has rejected that conclusion. Another point is the condemnation of the use of sodium salts and alkalines in the treatment of gout and the gouty state which has led to another series of practical mistakes. He quotes especially H. M. Lyman as supporting this view, that the alkalies and sodium salts are of value in the gouty states. In answer to the question what symptoms are referable to hepatic inadequacy presented by patients with irregular gout he mentions the following: In the first place the feces are often pale, from the absence of bile-coloring matter, and often very offensive. There is frequently constipation, but there may be diarrhea, and some liver enlargement, with tenderness, muddy complexion, yellowish conjunctiva and a sweet-bitter taste in the mouth with loss of appetite. The urine is highly colored and often of high specific gravity, and usually extremely acid. On boiling and adding nitric acid, various shades of mahogany color are developed and in some cases the urine looks almost as black as ink. This is very common in the gouty state. It is also commonly found in functional and malignant hepatic disease. There is another type of hepatic inadequacy, which he calls the liver of the seaside, which is hard to explain, but is observed in seaside resorts, and is relieved by change of residence. He believes that some subtle influence exists, checking the activity of the bile cells, and thus develops hepatic inadequacy. He mentions other facts which bear out this idea. There are physiologic reasons as well as clinical for incriminating the liver in the production of the gouty state. The liver is specially concerned in the metabolism of carbohydrates—its glycogenic function,—and also in the metabolism of nitrogenous material and in the formation of urea and uric acid. In the gouty the glycogenic function is often disturbed and restored by alkaline medication, and he asks, is it not reasonable to believe that another function of the liver carried on side by side with this one is also prone to be disturbed? He also finds the production of the bile disturbed in the gouty. As regards the diet of these cases he does not find a vegetable diet specially applicable, but he has seen great improvement with the exclusive or nearly exclusive diet of pounded meat and full draughts of hot water. It is the simplest diet that can be made and this is the principle which he thinks should be followed. The extremely simple food, limited in amount, causing digestive ease, means also freedom from goutiness. Nature finds some mischief still for idle food to do, paraphrasing Dr. Watts. There is much also in the quality and cooking of the food: often more than in the kind. There is a general impression that gouty people do not take enough exercise. That is not his experience. Excessive muscular activity leads to excess in food and then trouble comes. The advice to shake up the liver is bad.

On the Protection from Water-borne Disease Afforded by the Pasteur Chamberland and Berkefeld Filters. W. H. HORROCKS.—Experiments with the Berkefeld and Chamberland filters are detailed by Horrocks, who sums up his conclusions as follows: "1. Typhoid bacilli are not able to grow through the walls of a Pasteur-Chamberland candle, and if proper care be taken to prevent the direct passage of the bacilli through flaws in the material or imperfections in the fittings, the Pasteur-Chamberland filter ought to give complete protection from water-borne enteric fever 2. Typhoid bacilli can grow through the walls of Berkefeld candles, probably owing to the larger size of the lacunar spaces and the consequently diminished immobilizing and devitalizing influences. The time required for the typhoid bacilli to traverse a candle varies between four and eleven days, and appears to be largely dependent on the nutriment supplied to the organisms by the medium in which they exist. In order to obtain complete protection from water-borne enteric fever, when employing Berkefeld filters, it is necessary to sterilize the candles in boiling water every third day."

The Lancet, June 8.

An Explanation of the Vulnerability of the Apices in Tuberculosis of the Lungs. E. H. COLBECK AND ERIC PRITCHARD.—The vulnerability of the apices to tuberculosis is discussed at length by the authors, who find that according to their deductions, it is largely determined by alteration in the shape of the chest in conjunction with deformity or thinning of the musculature of the shoulder girdle. Woods-Hutchinson, who has worked at the subject from the side of comparative morphology and pathology,, expresses similar views. The importance of alterations in the shape of the chest and the abnormal condition of the shoulder girdle lies in the modification which these changes induce in the dynamic relations of the superior aperture of the thorax, whereby the movements of the apices become inverted in their relations to normal respiratory rhythm. It is this altered dynamic relation that furnishes the conditions which favors the lodgment of extraneous matter in the upper lobes of the lungs. The exact position of the site of the deposit is determined largely by the distance the apex rises above the border of the first rib, inasmuch as it is this extra-thoracic portion of lung which is acted upon by the forces that give rise to inverted movement. Since the apex rises from one inch to one and one-half inches above the border at the first rib, they conclude that the site of the deposit will be situated from one inch to one and one-half inches above the summit of the lung. This same method of reasoning probably explains proclivity to tuberculous disease of the basal lobe of the lung in cattle, which is also likely due to mechanical causes. The practical bearing of the theory is the enormous importance of developing the muscles of the shoulder girdle with the object of pulling the chest into shape, as Woods-Hutchinson puts it. To this end tree-climbing, ball-throwing, horizontal ladder and bar exercise and any muscular exercise should be sedulously and systematically carried out. The authors suggest that the subject is pertinent also to explain other abnormal conditions in the apex and call attention to development of emphysema in this situation.

Annales de Dermatologie (Paris), May.

Disseminated Gangrene of the Skin in Children. A. VEILLON.—A case is described and illustrated which proves that disseminated gangrene of the skin in children is not an isolated affection. From a clinical as well as a pathogenic point of view, the disease should be classed with true gangrene, and bacteriology reveals that it is due to the proliferation in the tissues of strictly anaerobic microbes, and is hence, a mortification in the tissues with a special fermentation, besides the necrobiosis. The writer has found the bacillus ramosus in all the cases of gangrene he has examined; in the present case it was associated with the staphylococcus.

Persisting Syphilitic Lesions Despite Intense Mercurialization. H. HALLOPEAU.—Syphilitic lesions on the soles of the feet or the palms of the hands are peculiarly rebellious to specific treatment, both general and local. Hallopeau describes a case and points out that the differences in structure of the skin in various parts of the body should be borne in mind in attempting to explain the pathogenesis of its alterations. In these cases the outer layer of the skin is so dense that the

mercury and iodin applied locally or brought in the circulation, are unable to penetrate the multiple rows of cells, and thus fail to reach the infectious elements in the epidermis.

Archives Gen. de Medecine (Paris), May.

Grippal Cerebrospinal Meningitis. E. SACQUÉPÉE.—The analogy is so close between the clinical picture of epidemic and grippal cerebrospinal meningitis that they can be differentiated only by bacteriologic examination. The lesions seem to be identical in nature and degree, but the grippal affection is apparently a milder infection. Six out of nine patients observed by Sacquépée recovered. Lumbar puncture had an unmistakably favorable effect on the course of the disease, and sodium salicylate and quinin also proved useful.

Bulletin Medical (Paris), May 25.

Pathogenesis of Floating Kidney. M. T. ROSENTHAL.—The displacement of the organ is not the essential cause of the disturbances in case of floating kidney, but rather a primary congestion of the organ. The digestive troubles are due to the congested and hence enlarged organ. This congestion is especially liable to occur in arthritic subjects, even in the absence of enteroptosis. The oppression and pains always appear in the two or three days preceding menstruation. In patients with insufficient menstruation the pains persist during the entire period and may outlast it. Another cause of floating kidney is an accidental displacement or luxation caused by some unusual exertion, such as lifting a heavy weight, an effort to stand on the tips of the toes or a fall on the feet. Nephropexy fails to relieve many of these cases as the recurring congestion is the real cause of the trouble. Massage is the only rational and successful method of treating it commencing at the lower pole of the kidney and working upward. A cold compress is kept on all night, with an abdominal band during the day. Twenty to forty-five séances are usually required. The first few are liable to be painful, and should last only five or six minutes. By the twelfth séance all pain and the dragging sensation are entirely banished.

Journal de Physiologie (Paris), March.

Technique of Thyroid Grafts. H. CRISTIANI.—The secret of success in transplanting the thyroid gland is to graft it in a number of long, flat pieces, not entire. These grafts heal in place and continue to develop normally, whether implanted in the peritoneum, abdominal wall, skin of back or front of thorax. Cristiani states that his attempts have been invariably successful and in a large variety of mammals.

Serum Treatment of Glanders in Man. A. DUPUY.—A single case is reported. The patient left the hospital cured in six months, after thirteen subcutaneous injections of 20 c.c. of normal beef serum in the first three weeks of the disease.

Revue Hebd. de Laryngologie (Bordeaux), May 25.

Pathogenesis and Treatment of Nasal Hydrorrhea. BRINDEL.—Microscopic examination of the nasal mucosa in cases of spasmodic coryza with nasal hydrorrhea, shows an accumulation of round cells, epithelial desquamation, multiplication of the blood vessels and great dilatation of the veins. These changes are accompanied by extravasation of the blood in the mucosa and transudation of the serum through the meshes of the connective tissue. The hydrorrhea is therefore a kind of edema with immediate exeretion of the extravasated fluid. The mucosa becomes more or less degenerated and the most favorable treatment is by single or double turbinotomy. No glands are visible in the tissues removed, in four-fifths of the cases. Brindel has recently treated a case in which the tissues removed by the turbinotomy were tubercular, showing that a primary, non-ulcerative tuberculosis of the nasal fossa may deceptively simulate spasmodic coryza with hydrorrhea and may be cured with the same treatment, that is, partial turbinotomy.

Revue de Gynecologie (Paris), March-April.

Surgical Perforation of the Uterus. P. REBREYEND.—The progress of modern surgery enables us to view instrumental perforations with considerable equanimity now-a-days. Simple puncture does not require operative treatment, but an actual wound demands immediate repair. This should always be done through the abdomen. The uterus should not be sacrificed except in case of irreparable lesions, or for some cause foreign to the perforation. Fourteen instances of perforation of the uterus are tabulated, with three deaths. In Stickney's case, a supposed tumor was punctured twice but proved to be merely the gravid uterus, with delivery imminent and normal. Pinard has published a case in which he punctured for a supposed tumor, finding later that it was a case of twin pregnancy with dropsy of one fetus, born later macerated. Twenty liters of fluid were removed by Tillaux from the uterus at the sixth month of pregnancy in another twin pregnancy. Mackenrodt produced a perforation by traction, Zinke with the curette. The latter healed after tamponing.

Primary Malignant Disease of Fallopian Tube. A. BOURSIER.—In the 38 cases collected a malignant deciduoma was found in one case, sarcoma in 5 cases and primary epithelioma in 32. The majority of the patients were between 45 and 50, none over 60 or under 40. There is no connection evident between the menopause or menstrual disturbances and the development of the tumor. Sterility was frequently noted; 7 patients had borne one child twenty to twenty-three years previously; 3 were III-parae and the others had had one or two abortions. Evidences of preceding inflammation were noted in some cases. There is no pathognomonic sign, but the tube is usually more or less round; the size depends on the amount of fluid accumulated in it. In the personal case described the tumor had been noticed for three years. It caused at first merely hypogastric pains and a watery, blood-stained discharge from the uterus, not interfering with active occupation until late in the disease. The tumor was noticed for one to three or four years in most cases, but Tuffier's patient required operation in two months after the first symptoms, Cullingworth's within four months, and Watkins' in fourteen days. The latter patient had a fibromatous uterus and each tube contained a malignant papilloma. The sero-sanguinolent vaginal discharge is continuous if the uterine ostium is permeable, and intermittent if only permeable when the fluid attains a certain pressure. If the pains subside and the tumor diminishes in size as the discharge continues, it is evident that a pocket in the tube is being emptied. But if these signs occur in a woman between 45 and 50, whose strength has been failing, they suggest the possibility of a malignant neoplasm. There is nothing characteristic about the ascites, but in case the abdominal ostium is permeable, the fluid may escape directly into the peritoneal cavity unless it is walled off around the tube. In this case a pocket will form, and in this the "salpingian vomica" will accumulate. None of the cases on record were correctly diagnosed. Veit's patient is in good health seven years, Tuffier's and the writer's, one year, and Fearne's nineteen months after operation. In all the other cases the disease recurred, and the patients succumbed. The tumor remains inclosed in the tube for a long time and hence extirpation is comparatively easy.

Congenital Polycystic Kidney. BROUHA.—There is evidently some primary malformation as the basis of these cases, the non-coalition of the two halves, supplemented by retention of fluid secreted or transuded into the cavity of the secretory portion of the kidney. Study of a number of cases of congenital polycystic kidney has demonstrated that the secretion of urine in the fetus is by no means as insignificant as generally assumed, and that it is an important factor in the genesis of this condition.

Revue de Medecine (Paris), May.

Epidemic Character of Essential Zona. C. DOPTER.—Three cases of zona occurring in the inmates of a certain room, confirm Dopter's theory that a primary infection alone is epidemic, but the infection may attain, naturally or by acquisition, an elective affinity for a certain segment of the spinal cord, with whose nutrition it interferes in the various organisms infected simultaneously or in turn.

Malarial Polyneuritis. BOINET.—Paraplegia and atrophy followed a stage of dull and later, acute pain in the legs in the case described. The atrophy was more marked on the left side,

The anesthetic zones corresponded to the segmental distribution of nerves; the plantar reflex was exaggerated, other reflexes diminished. No vasomotor disturbances were noticed. Electrotherapy is useful in these cases, with hydrotherapy, iron and iron cacodylate. Quinin is useless except in acute malaria.

Semaine Medicale (Paris), June 5.

Early Signs of Puerperal Phlebitis. A. BOISSARD.—The variability in the appearance, course and termination of these venous affections has convinced Boissard that they are due to different or associated infectious agents and not to the streptococcus alone. Puerperal phlebitis is increasing, and it is more frequent in private than in hospital practice. It has occurred in 16 cases in the writer's experience of 4000 accouchements at the Tenon hospital. One leg was affected in 12 cases and both legs were involved in 4. In 6 instances the phlebitis appeared between the third and the eighth day, and in 10 between the twelfth and the twenty-first. The patients were febrile at the moment of delivery in the 6 cases in which the phlebitis appeared during the first week. In 5 cases the phlebitis developed after a physiologic puerperium with no elevation of temperature at any time nor during the course of the venous affection, but commencing with the phlebitis in 3. In the course of an apparently physiologic childbed, a blood-clot forms with a slow and insidious phlebitic process in some uterine sinus or periuterine venule. From this point the embolism spreads and the lesions extend to the small pelvis and the legs. This primary focus is manifested by a pain in the uterine cornu or broad ligaments, not very severe—it must be sought for. The patient notices it on movement or on digital pressure toward the hilus of the uterus. It is constant and is always accompanied by indications of pulmonary embolism; dyspnea for twenty-four to forty-eight hours, followed by a pain in the side suggesting the onset of pleurisy, the pains radiating to the shoulder, and aggravated by compression of the phrenic nerve or anterior attachment of the diaphragm. Percussion and auscultation are negative until twenty-four hours later, when a focus of sub-crepitant, moist râles is noticed from behind, in the lower third of the thorax. An apoplectic infarct has been formed and this determines a slight effusion. This pulmonary infarction is the result of the arrival of minute emboli composed of colonies of the infectious agents, rather than of blood clots. These emboli are harmless in comparison with the emboli that develop in the course of an established phlegmasia, which kill by their size or by their suppurative nature. The harmlessness of these primary emboli is shown by the fact that the temperature does not rise. Boissard has observed that all his patients recovered whose temperature remained below 38 C. This benign embolism of the lungs is followed generally in twenty-four hours by the appearance of a phlegmasia alba dolens on the same side as the pain in the thorax. Its extent and duration are by no means proportional to the intensity of the pleuro-pulmonary manifestations. Certain families seem to display a tendency to puerperal phlebitis, usually fat women of the neuro-arthritic type, although the childbed may be apparently normal and physiologic for the first two weeks.

Beitraege z. Allgemeine Pathologie (Jena), xxix, 2.

Artificially Induced Calcareous Deposits in Organs. J. V. KOSSA.—Calcareous deposits are observed in the kidney after ligature of the hilum. The calcium is evidently derived from the surrounding tissues and penetrates into the cortex through the capsule. Kossa reports experimental researches which demonstrate that this same result can be attained by chemical means. Aloin, copper sulphate, iodin and iodoform all possess this property more or less. The normal kidney can eliminate large amounts of calcium without the formation of deposits, and consequently a functional disturbance always precedes their formation. The kidney suffering from the chemical action of the poison is no longer able to excrete the total amount of the calcium brought to it in the blood, and the amount thus retained is the source of the calcium crystals visible to the naked eye in the convoluted tubules. The crystals stain yellow in a 1 to 5 per cent. solution of silver nitrate, probably from the albuminate or other organic constituents. Smaller deposits are found also in other organs.

Berliner Klinische Wochenschrift, June 3.

Segments of the Spinal Cord in the Diagnosis of Tumors. F. KRAUSE.—Three cases are described in detail—one cured by the removal of the tumor—demonstrating the valuable information derived from the study of the symptoms in reference to the segments of the spinal cord, to determine the exact site of the tumor. Of the 32 cases of spinal tumors which have been published as operated on, 14 patients died in consequence of the operation and 18 were improved or cured. In the first 20 cases there was a mortality of 10, but there have been only 4 deaths in the last 12. In the personal case described resulting in the cure of the patient, the symptoms indicated severe compression of the cord by a slowly developing tumor inside the dura, to the rear, on the right side. The presence of the knee-jerk showed retention of normal reflex function in the second, third and fourth lumbar segments, and that the lower limit of the tumor's action could not extend below the first lumbar segment. The increased tendon reflexes on the completely paralyzed right side showed that the tumor—above the second lumbar segment—had interrupted the reflex-inhibiting influence from above. This was the only information to be derived in regard to the lower limit of the tumor. It indicated that the compression could not extend below this point. The complete paralysis of the psoas and iliacus muscles indicated that the twelfth dorsal segment must suffer also from the compression. The paralysis was of the kind due to interruption of central conductibility. The injury to the pyramidal tract from the compression of the tumor was necessarily above the first lumbar segment of the spinal cord from which the psoas and iliacus derive their innervation. There was also a distinct girdle of pains, commencing in the sacrum and passing along the upper margin of the pelvis. This region derives its innervation from the twelfth and eleventh dorsal segments. The patient complained of pains in the left leg and right thigh, suggesting irritation in twelfth dorsal and first lumbar segments. The nerve roots are intimately connected with the neighboring roots and irritation of one may entail sympathetic irritation in its neighbors. In this case the symptoms of irritation might appear two roots higher than the actual location of the tumor, but this usually occurs only in case of severe pains. The evidences of interruption in the sensory tracts were diminished sensibility and pain in the region on the left innervated by the first lumbar segment, extending nearly to the iliac crest, with modified thermic sense. Still more suggestive was an oval zone of complete anesthesia on the right side at the back, between the sacrum and the trochanter major, commencing below the iliac crest and extending to a hand's breadth above it. The absolute anesthesia at this spot indicated that three neighboring root regions were paralyzed, the twelfth dorsal segment, from which its innervation was directly derived, and also the segments immediately above and below this. While the motor paralysis extended only to the first lumbar segment, the anesthetic zone included the twelfth dorsal region, and—if we agree with Bruns—the eleventh and even the tenth segments were also involved. The upper limit of the tumor was therefore diagnosed in the tenth dorsal segment, that is, at the seventh spinous process. Its lower limit could not extend below the first lumbar segment, that is, the ninth or tenth dorsal vertebra. The soft parts were incised from the sixth to the tenth dorsal vertebra and tamponed. No ligatures were required. A space from the sixth to the ninth vertebra was opened, exposing the spinal canal for 7.5 cm. The center of the tumor was at the seventh vertebral arch corresponding to the ninth dorsal segment according to Henle; to the upper edge of the tenth according to Reid and to the eighth according to Gowers. The dura above pulsated with the respiration, the spinal cord below with the heart beat. The tumor was 17 by 15 by 11.5 mm. It was easily detached from the pia but was adherent to the dura, requiring the resection of the adherent portion 40 by 17.5 mm. in size. A depression was left in the spinal cord. The tumor did not extend far enough to compress the nerve roots. The edges of the wound in the dura were coapted above and below the site of the tumor without suturing. A drain was inserted at each end of the wound. The operation was completed in

forty-five minutes. The tumor was hard as a stone, cellular, studded with numerous round calcareous deposits and round, concentrically arranged balls of cellular tissue and numerous transitional forms between these two. Considerable cerebro-spinal fluid was lost, and it continued to ooze from the wound for five days, but the temperature remained normal and the patient was discharged in a month. The paralyzed limb has gradually regained its function but is still weak. There is now—a year later—no muscular paralysis, no vasomotor disturbances; the knee-jerk is normal but the plantar reflex and the abdominal wall reflex can not be induced. In the second case, the patch of absolute anesthesia was in front on the left side, at the eleventh rib, corresponding to the seventh and eighth dorsal segments. This indicated paralysis of the sixth dorsal and—according to Bruns—of the fifth dorsal segment likewise. Consequently the upper limit of the tumor must be at this point, which is opposite the fourth dorsal vertebra. The autopsy in this case confirmed the diagnosis. A carcinomatous growth was found at this point. The anesthesia was due to compression of the cord and not of the roots, in both these cases. The girdle pains in the second were at the level of the ensiform process which also harmonized with this location of the tumor. In the third case, the zone of absolute anesthesia extended in front on the left side to the sixth intercostal space; at the back, to the seventh dorsal vertebra, both pointing to the sixth dorsal segment as the portion of the spinal cord affected. On the right side, it extended in front to the eighth rib and at the back, to the tenth dorsal vertebra, pointing to the eighth dorsal segment. The autopsy disclosed that on the right side the tumor had encroached on the ligamentum denticulatum and had thus exerted direct pressure on the nerve roots in the region, especially on the sixth dorsal nerve at its root. Compression of this region produces the same phenomena of anesthesia as if the sixth dorsal segment, in which it originates, were sympathetically affected. The difficulty in the diagnosis in this case was due to the girdle pains, which corresponded to the sixth and seventh dorsal segments and extended along the costal arch to the stomach. Like the zone of hyperesthesia, the girdle pains indicate irritation of the posterior roots. The compression of the roots or of the segment is sufficient to induce irritation but not to cause suspension of conductibility. A sponge dipped in hot water and applied to the spine was felt as pain between the fifth and the ninth dorsal vertebræ on the left. The tumor was diagnosed in this region and it was found at the sixth dorsal vertebra. In the three cases the lack of correspondence between the upper boundaries of the nervous disturbances and the seat of the tumor was remarkable. In the first case the upper limit of the anesthetic zone was a hand's breadth above the iliac crest while the tumor was at the seventh vertebral arch, that is, 17 to 18 cm. higher. In the second case the carcinoma was at the level of the fourth dorsal vertebra. The girdle pains were on a level with the ensiform process, 17 cm. lower. The anesthetic zone commenced nearly 20 cm. farther down, at the eleventh rib. In the third case, the girdle pains were 12 cm. below the tumor at the sixth dorsal vertebra. The zone of anesthesia commenced at the tenth dorsal vertebra on the right side, and thus 13 cm. below the tumor, but on the left side, where the tumor—a sarcoma—had developed into the ligamentum denticulatum, and exerted direct pressure on the nerve roots, the location of the tumor was not much higher than the upper limits of the anesthetic zone, the distance from the sixth to the seventh dorsal vertebra being only 2.5 cm.

Centralblatt f. Gynecologie (Leipsic), April 27.

Yeast in the Treatment of Leucorrhea. W. ALBERT.—The disadvantages of the yeast treatment advocated recently by Landau, are all obviated by using killed cultures of yeast cells. The substance thus formed is called sterile "Dauerhefe" by the writer, which might be translated "everlasting yeast." Vaginal secretions rapidly diminish and dry up, even large erosions heal fast, and when it is injected the night before an operation, the vagina is disinfected and sterilized better than with any other preparation known to date. The yeast displays its strongest fermenting power at 35 to 40 C.—the temperature it finds in the vagina. Kossmann in a later number quotes Hippocrates to the effect that yeast was recommended in his day in gynecology. He used it cooked but Dioscorides later, preferred it uncooked. He adds "there is little new to be discovered in medicine, but as a knowledge of Greek is no longer necessary for the medical course in Germany, many wonderful new discoveries may be anticipated in the future."

May 25.

Fate of Prematurely Born, Artificially Delivered Children. F. AHLFELD.—Tracing the history of 54 children born to 56 women with deformed pelves, Ahlfeld finds that all but five survived the first year. The parents were all of the wage-earning class. This record is much above the average.

June 1.

Ultimate Fate of a Malignant Syncytioma of the Vagina. A. O. LINDFORS.—This case has been mentioned already in THE JOURNAL. One month after childbirth a malignant syncytioma was removed from the vaginal wall. There were no uterine symptoms. Lindfors reports now that the patient returned a year later with symptoms of a left pleurisy with effusion. The autopsy disclosed a large syncytioma—a malignant deciduoma—in the left lung with numerous metastases in other organs, but the genital organs were entirely free. The embolus of the placental tissue in the left lung probably arrived at the time of the vaginal lesion, but did not commence to develop until favored by a grippal catarrh a year later.

Deutsche Med. Wochenschrift (Berlin and Leipsic), June 13.

Inexplicable Intestinal Necrosis. L. BORNHAUPT.—A robust young man died after two days of severe symptoms indicating intestinal obstruction and asphyxia, although there was no tenderness nor meteorism. The autopsy showed the body normal except for a patch of necrosis without demarcation, on the ileum, 50 cm. above the cecum, with a corresponding necrotic patch on the mesentery. The right pleural cavity contained a coagulum the size of two fists. As the respiratory organs were sound in every respect the cause of this hemorrhage is a mystery. It is not impossible, however, that in consequence of this hemorrhage, some mesenteric vessel became occluded by an embolus, with consecutive necrosis. A few cases are on record in which thrombosis of the mesenteric arteries produced symptoms of intestinal occlusion and hemorrhage. The contents of the central portion of the intestines in the case described were blood-stained.

Deutsche Zeitschrift f. Chirurgie (Leipsic), March.

Intracranial Complication of Middle-Ear Disease. E. MERKEN.—High fever and rapid pulse suggest meningitis, when they accompany symptoms of irritation, and a tempestuous course, with rapid changes in the clinical picture. In the case of an abscess the temperature is nearly normal, the pulse slow, with symptoms of paralysis, and a more insidious course may be anticipated. If the abscess is on the left side, typical disturbances in the speech follow. Encephalitis is much less frequent than abscess, and puncture or incision of an encephalitic focus apparently does little harm. With meningitic symptoms great benefit or great harm may result from an operation, and hence, the surgeon should proceed step by step. Paracentesis alone may rapidly relieve the most threatening symptoms. If no signs of suppuration can be found in the mastoid process and the symptoms grow worse, the dura or sinus can be exposed. If still no pus is found, and nothing to explain the symptoms, the brain may be punctured or even incised, proceeding even to puncture of the lateral ventricle. Meningitic symptoms in children may be caused exclusively by the ear affection.

Cysts in the Pancreas. G. SEEFISCH.—The clinical symptoms in four cases were violent subjective disturbances at first, mostly gastric, ranging from a mere sensation of oppression to intense pains, vomiting and signs of retention; emaciation; development of a tumor in the epigastric region, usually towards the left; location near the posterior abdominal wall, close to the aorta and hence, aortic pulsation; little or no mobility, but in some places the influence of the respiration on the pancreas was visible, and the position of the artificially

inflated stomach and the transverse colon, in front of the tumor. Seefisch has collected 149 published cases, of which 19 were treated by total and 12 by partial extirpation. In 118 cases the cyst wall was sutured to the abdominal wound, opened and drained.

Muenchener Med. Wochenschrift, June 4.

The Present Mortality After Gall-Stone Operations. H. KEHR.—Reviewing his 585 operations for gall-stones, Kehr observes that the mortality—aside from the cases complicated with carcinoma or diffuse cholangitis—is 3.7 per cent. in all, and only 1.7 per cent. in his last 60 operations. If the pancreas is involved—and the more he operates, the more frequently he finds acute or chronic inflammations of this organ—the prognosis depends on the possibility of curing the pancreatic affection. He attributes the improvement in his results of late years to his method of leaving the hepatic duct open and merely tamponing. He mentions that in his last 100 operations, 40 per cent. of the men died and only 8 per cent. of the women. Carcinoma of the head of the pancreas, and peritonitis with adhesions, are more frequent in men; probably both are due to traumatic influences from which women are exempt. As a general thing, he finds that women bear laparotomy better than men. Scheuer has calculated that about 41.5 per cent. of the cases are cured by internal treatment, Naunyn estimates the number at 40 per cent., and Furbringer has recently stated that about 50 per cent. of the patients leave Carlsbad uncured. Surgeons, on the other hand, cure 95 to 98 per cent. of all the cases that come into their hands, and an experienced surgeon is a much better expert at diagnosis than the best practitioner, as the latter seldom or never profits by that wonderfully instructive textbook, the surgical dissection *in vivo*.

Prager Med. Wochenschrift, May 2.

Neoplastic Thrombosis. C. SPRINGER.—A sarcoma in the thyroid gland required tracheotomy, and neoplastic thrombosis was then noticed in the veins of the region. The autopsy showed that the edema in the face, and later in the arms, corresponded to the progress of the venous thrombosis from the neck toward the center and thence laterally to the subclavian. A fragment of the tumor had even found its way into the right heart, causing a peculiar murmur.

Diabetes Mellitus Simulating Gastrointestinal Affections. E. SCHUETZ.—In all chronic gastrointestinal affections from an unknown cause, the urine should be repeatedly examined for sugar. Diabetes frequently manifests itself first under the clinical picture of dyspeptic symptoms, gastralgia, colic or the gastric crises of tabes. These disturbances are usually accompanied by frequent neuralgias and paresthesia in various parts of the body, occurring simultaneously or alternately. Antidiabetic diet favorably modifies these disturbances.

Mechanism of Arsenical Treatment of Malignant Tumors. C. TRUNECEK.—The benefits of the application of arsenious acid in the treatment of epitheliomata of the face, are now established beyond further question. THE JOURNAL has frequently commented on and described the author's method. He now announces that carcinoma or sarcoma cells are directly necrosed by the action of the arsenic and their protoplasm coagulated. The stroma cells become degenerated and exudation follows, which in turn produces further changes in the tumor cells. Inflammation with demarcation is the result of the application of arsenic to the surrounding sound tissue. It gradually passes into a suppurative stage, terminating in the throwing off of the entire necrosed tumor as a foreign body. In short, the organism reacts to the arsenically treated tumor as to a foreign body and throws it off. The tumor left alone does not induce any reaction of this nature; the organism makes no effort to defend itself against it, and is in turn destroyed by it.

Sammlung Klin. Vortraege, No. 297.

Diagnosis of Puerperal Fever. P. JUNGE.—The difficulties of differentiating puerperal fever are peculiarly great when typhoid fever makes its first appearance at childbirth. Junge has had an experience of 2 cases of typhoid deceptively simulating puerperal fever, 6 of mastitis, 2 of acute arthritis, 1 of pharyngitis with a dermatitis and nephritis, and 1 of infarction of the lungs.

Wiener Klinische Rundschau, June 2.

Treatment of Bacteriuria. W. BUTTERMILCH.—In most cases of bacteriuria a preceding intestinal affection will be noted. The bacteria invade the bladder through the blood and the treatment depends on whether their presence in the bladder is favored by some local lesion or not. In one case described the treatment was directed against the helminthiasis observed, followed by .5 salol four times a day. After five days this treatment was substituted by a 5 per cent. decoction of uva ursi leaves, a teaspoonful every hour. The urine was entirely clear in three weeks. In another case with gonorrheal antecedents, the bacteriuria resisted all the usual measures for four weeks, including large doses of camphor, but yielded at once to local irrigations with a 1 to 10,000 solution of sublimate. The colon bacillus was found pure in each case. The irrigations had to be repeated four times, as the bacteria evidently developed unchecked in the intervals of treatment, before their final annihilation. In the first case catheterization showed that the infection was by way of the kidneys and consequently general treatment was indicated. The blood was sterile at the time of examination in each case.

June 9.

Idiopathic Peritonitis. H. NOTHNAGEL.—The enormous absorbing power of the peritoneum enables it to dispose of bacteria and toxins circulating in the blood and hence the peritoneum is not involved so frequently as the other serous membranes in case of acute infectious diseases, and there is no possibility of a primary, idiopathic inflammation. Rabbits can absorb without injury 3 to 8 per cent. of their weight of physiologic salt solution injected into the peritoneum. But in case of an affection in the vicinity of the peritoneum, the germs and toxins arriving in such large numbers, are liable to cause inflammation. Nothnagel denies that peritonitis can occur as a primary infection. He always traces it to some lesion in the vicinity: a catarrhal condition or laceration of the intestines, possibly some minimal traumatic lesion, allowing the passage of bacteria into the peritoneum. The only way in which microbes can reach the peritoneum in numbers sufficient to set up an inflammation, without solution of continuity, and the passage through some other tissue, is by way of the female genitalia. But in every case of the kind reported there has always been a co-incident genital affection, some focus in the vicinity from which the infection was propagated.

Wiener Klin. Wochenschrift, June 6.

Cerebral Abscesses in Connection with Affections of the Bronchial Lymph Glands. F. SCHLAGENHAUFER.—At the autopsies of three young women who had died after an acute illness of four to six days' duration, suggesting suppurative meningitis, occurring in the midst of health, multiple abscesses were found in the brain. In two cases perforation had induced a suppurative meningitis. In each case the primary focus was discovered in a suppurating lymph gland below the bifurcation of the trachea, near the right bronchus. The bronchial gland abscess communicated either with the bronchus or esophagus or with both. The primary abscess was tubercular in each case: in two there were slight pulmonary tubercular lesions; in one the lungs were sound. Two similar cases of cerebral abscess have been reported, and the five suggest an explanation for the so-called idiopathic cerebral abscesses or cryptogenetic septicopyemia. The bronchial and tracheal lymph glands should be investigated in all such cases. They also confirm Ribbert's theory that the primary localization of pulmonary tuberculosis is not the lungs but the bronchial, peritracheal glands.

Wiener Med. Wochenschrift, April 13.

Early Diagnosis of Tabes and Paralysis. J. DONATH.—A disturbance in the innervation of the iris muscles is indicated when the edges of the pupils are irregular; oval, pear-shaped,

triangular or polygonal with rounded angles or picket-shaped. These irregularities in the edges of the pupils can be seen best in a dark room by lamplight, viewed from the side, with a powerful magnifying glass. Donath considers them pathognomonic of a pre-ataxic stage, which may or may not develop into progressive paralysis or tabes. He describes one case in which complete paralysis of the sphincter of the iris and the ciliary muscles preceded by ten years the manifestations of progressive paralysis. The ocular paralysis subsided after a few months. Five years later the pupil reflex vanished on both sides and after a similar interval symptoms of paralysis developed, fatal in six months, the patient previously robust and successful in extensive financial affairs. In another case, myosis, absence of the pupil reflex, and slight atrophy of the optic nerve have persisted for fifteen years, with no apparent tendency to further symptoms. The age assists in differentiating paralysis, as it usually appears between the thirtieth and fiftieth year.

Brazil-Medico (Rio de Janeiro), May 8.

Tropa-Cocain in Spinal Analgesia. D. DE ALMEIDA.—The writer reports a series of major operations successfully performed under spinal cocainization with a 2 per cent. solution of tropa-cocain. No mydriasis, headache nor vomiting was observed in any case.

Curare. J. B. DE LACERDA.—The organizers of the recent Latin-American Congress invited Lacerda, the author of the theory of the symbiosis of the yellow fever germ with a mould, to deliver an address on the bacteriology of yellow fever. He refused, as his convictions on the subject have weakened of late and he did not feel himself competent to see clearly in the chaos at present reigning in regard to the etiology of the disease. He reported instead, some recent research on the subject of curare, which he discovered is made by the Ticunas from a mixture of plants, including Castel Ney Strychnos, a piperacea and the anomospermum grandifolia. Studying the latter alone, he found that the fluid extract possessed all the properties of curare. The progress of the paralytic phenomena is more clearly defined than even with curare, showing the succession of the symptoms, commencing with paralysis of the hind legs, then of the forelegs, muscles of the tail, ears, lids and finally of the respiratory muscles. The sensory perceptions are retained to the last.

Revista Medica de Bogota, Colombia, No. 250.

Yellow Fever. N. OSORIO.—A suspicious fever is epidemic at certain points in Colombia and Osorio appeals to the authorities to appropriate funds for the manufacture of Sanarelli's anti-yellow-fever serum, which he considers the only effective remedy to date against the disease.

Yellow Fever. J. M. ESCOBAR.—The writer's long experience with yellow fever shows that the best results are attained by the following treatment: Against the fever, cold baths and iced, acid drinks are sufficient. The same drinks are indicated in case of vomiting, alternated with small glasses of champagne mixed with equal parts of an alkaline water. If these fail, he prescribes five drops of essential oil of cajeput in an aromatic infusion, supplemented by ether or chloroform, but never by cocain. A milk diet and alkaline drinks are the best means to sustain the renal permeability, but when the amount of albumin exceeds 1.5 per 1000, the urinary insufficiency requires more immediate measures, and oxygen inhalations are indicated. In one case the albumin attained 3.5 per 1000, but had entirely vanished after four days during which twenty-four liters of oxygen had been inhaled each day. In case of hemorrhage, besides the usual hemostatic measures he administers calcium chlorid, as the change in the blood plasm is the immediate cause of the multiple hemorrhages; continuing the oxygen, which has proved so successful in hemorrhage consecutive to icterus. The diet should be restricted to coffee, champagne and milk containing an alkali, but if rectal alimentation alone is possible, water should be given copiously, brandy to stimulate the circulation and peptonized milk. Pepain is preferable to pepsin for the purpose, however, as it works in an alkaline medium while the latter requires an acid.

Queries and Minor Notes.

LODGE PRACTICE.

ASHTON, R. I., June 14, 1901.

To the Editor:—By enclosed clippings from the Pawtucket, R. I., *Times* of 13th inst., you will perceive how the profession is degraded by men who allow themselves to be championed and exploited, we might say enslaved, by secret and other societies in opposition to ethical members of the profession, who are consequently insulted by municipal bodies daring to offer them a miserable dime-piece for their services, which was, no doubt, greedily clutched at.

The Medical Association of Pawtucket, numbering among its members the leaders of the profession in that city, refused to meet with those who eagerly grasped at the miserable pittances forced on them by the secret and other societies, and who have banded themselves in a rival club named the Pawtucket Medical Society, which is, I need not say, not affiliated with the State Society. Some of them come out here, a distance of five miles, to examine for an Insurance Company which flings to them the munificent dole of 25 cents per capita, as you would a bone to a dog. Comment is unnecessary.

Following is the clipping referred to: "The meeting of Court City of Pawtucket, Foresters of America, which was held last evening in St. George's Hall, Cole's Block, was of more than ordinary interest because a movement was begun to institute a boycott of the physicians of the city and vicinity who are members of the Pawtucket Medical Association, because of the stand taken by the association that no member of the association can act as physician for any lodge or social, secret or fraternal organization within the jurisdiction of the association, unless in violation of the ethics of the fraternity. It will be recalled that recently the Pawtucket Medical Association declared against any member acting as lodge physician, and this fact in due time came to the attention of the court. Last night the subject was well discussed and action was taken after the subject had been pretty well talked over and well understood. It was voted to appoint a committee of three to confer with all social, fraternal and secret organizations of Pawtucket and vicinity for the purpose of securing the united pledging of the support of the various organizations, in a movement that shall pledge every member of the lodges and societies not to employ for himself or family a member of the Pawtucket Medical Association. There was a great deal of plain talk, and it was held by some of the speakers that the stand of the association was arbitrary and there were just as good physicians out of the association as were included in the membership. The committee was authorized to act on its own discretion, but to lose no time in carrying out the instructions, which were given by unanimous vote of the court."

N. O'D. PARKS, M.D.

ANS.—We know nothing further of the merits of this particular case, but that physicians in many places are being used by organizations for the aggrandizement of these bodies is well known. It would be well if this growing evil could be recognized before it is too late and if it could be met by an organized profession, and not by a disorganized one, as seems to be the case in Pawtucket.

THE HIPPOCRATIC OATH.

ITHACA, N. Y., June, 1901.

To the Editor:—Will you kindly send me a copy of the Hippocratic oath, or tell me where I can get one? A. T. K.

THE OATH.

I swear, by Apollo the physician, and Æsculapius, and Health, and All-heal and all the gods and goddesses, that, according to my ability and judgment, I will keep this oath and this stipulation to reckon him who taught me this Art equally dear to me as my parents, to share my substance with him, and relieve his necessities if required, to look upon his offspring in the same footing as my own brothers and to teach them this Art, if they shall wish to learn it, without fee or stipulation, and that by precept, lecture and every other mode of instruction, I will impart a knowledge of the Art to my own sons and those of my teachers, and to disciples bound by stipulation and oath, according to the law of medicine, but to none others. I will follow the system of regimen which, according to my ability and judgment, I consider for the benefit of my patients, and abstain from whatever is deleterious and mischievous. I will give no deadly medicine to any one if asked, nor suggest any such counsel; and in like manner I will not give to a woman a pessary to produce abortion. With purity and with holiness I will pass my life and practice my Art. I will not cut persons laboring under the stone, but will leave this to be done by men who are practitioners of this work. Into whatever houses I enter, I will go into them for the benefit of the sick, and will abstain from every voluntary act of mischief and corruption; and further from the seduction of females or males, of freemen and slaves. Whatever in connection with my professional practice or

not in connection with it, I see or hear, in the life of men, which ought not to be spoken of abroad, I will not divulge, as reckoning that all such should be kept secret. While I continue to keep this Oath unviolated, may it be granted to me to enjoy life and the practice of the Art respected by all men in all times!

But should I trespass and violate this Oath, may the reverse be my lot!

CONGENITAL NASAL DEFORMITY.

MINNEAPOLIS, MINN., May 27, 1901.

To the Editor:—I have a patient whose face is rather disfigured by a congenital deformity of the nose, to remedy which it would be necessary to increase the height of the septum. Please tell me if such operations have proven successful and give the address of some surgeon making such operations a specialty, to whom I could refer this patient with assurance of fair treatment.

Yours truly, A. B. C.

ANS.—Such operations are being successfully performed almost daily, and the results are usually satisfactory. Each case is peculiar to itself, and just what will have to be done can only be determined by examination of the particular case. We can not recommend any particular surgeon. As it is not a specialty, all well-qualified surgeons are prepared to operate on such cases.

RHODE ISLAND STATE BOARD.

RICHMOND, VT., June 13, 1901.

To the Editor:—Please give me the name and address of the secretary of the State Board of Medical Examiners of Rhode Island.

W. T. T.

ANS.—Address Dr. Gardner T. Swarts, Secretary State Board of Health, 48 Weybosset St., Providence, R. I.

STATE BOARD EXAMINATIONS.

CARROLLTON, KY., June 17, 1901.

To the Editor:—Please give me list of states in which a graduate of a recognized medical college can practice without having to stand the state board examinations. J. H. A.

ANS.—The answer to this query appeared in THE JOURNAL of April 13, p. 1081.

The Public Service.

Army Changes.

Movements of Army Medical Officers under orders from the Adjutant-General's Office, Washington, D. C., June 13 to 19, 1901, inclusive:

Lawrence C. Carr, major and surgeon, Vols., recently appointed, relieved from duty in the Department of Cuba, when his services can be spared by the general commanding that department, to proceed to San Francisco, Cal., en route for assignment to duty in the Division of the Philippines.

Henry R. Carter, Jr., contract surgeon, former orders so amended as to direct him to proceed to his home, New Orleans, La., for annulment of contract.

J. C. Garlington, contract surgeon, leave of absence granted.

Frederick C. Jackson, captain and asst.-surgeon, Vols., from temporary duty at Columbus Barracks, Ohio, to San Francisco, Cal., en route to duty in the Division of the Philippines.

Frank R. Keefer, captain and asst.-surgeon, U. S. A., leave of absence granted.

Franklin M. Kemp, lieutenant and asst.-surgeon, U. S. A., from West Point, N. Y., to San Francisco, Cal., en route to duty in the Division of the Philippines.

William L. Kneedler, major and surgeon, U. S. A., now under treatment at the U. S. General Hospital, Presidio of San Francisco, Cal., relieved from further duty in the Division of the Philippines, to proceed, on the expiration of his present sick leave, to West Point, N. Y., to relieve Lieut. Franklin M. Kemp, asst.-surgeon, U. S. A.

Stanley S. Warren, contract surgeon, from Fort Clark, Tex., to his home, Shelbyville, Tenn., for annulment of contract.

William P. Woodall, contract surgeon, from Salado to Fort Clark, Texas.

In addition to the above the following-named officers are detailed as members of the faculty of the Army Medical School: Colonel Wm. H. Forwood, asst. surgeon-general, U. S. A., as president of the faculty, vice Colonel C. H. Alden, U. S. A., retired; Colonel Calvin DeWitt, asst. surgeon-general, as professor of military medicine; Maj. John Van R. Hoff, surgeon, as lecturer on the duties of medical officers in war and peace; Major William C. Borden, surgeon, as professor of military surgery, vice Colonel Forwood, designated as president of the faculty; Major William P. Reynolds, surgeon, U. S. Vols. (captain and asst.-surgeon, U. S. A.), as instructor in Hospital Corps drill and first-aid to wounded, vice captain George D. DeShon, relieved.

Navy Changes.

Changes in the Medical Corps of the Navy, week ended June 22, 1901:

Dr. H. M. Tolfree, appointed assistant-surgeon from June 14, 1901.

Surgeon C. F. Stokes, ordered to the *Solace*, upon arrival in the United States.

Asst.-Surgeon R. B. Williams, ordered to the *Kearsarge*, June 24.

Asst.-Surgeon F. M. Furlong, detached from duty at Guam and ordered to the *Solace* for transportation home.

Asst.-Surgeon R. K. McClanahan, detached from the *Culgoa* and ordered to the *Vicksburg*.

Asst.-Surgeon D. B. Kerr, detached from the *Vicksburg* and ordered to the *Culgoa* to wait orders en route

Marine Hospital Changes.

Official list of the changes of station and duties of commissioned and non-commissioned officers of the U. S. Marine-Hospital Service for the seven days ended June 20, 1901:

Surgeon C. T. Peckham, granted extension of leave of absence, on account of sickness, for thirty days from June 20.

Surgeon R. M. Woodward granted extension of leave of absence for three weeks from June 5.

P. A. Surgeon C. H. Gardner, granted leave of absence for seven days from June 21.

Asst.-Surgeon G. M. Corput, relieved from duty at the port of St. Louis, Mo. Leave of absence for one month granted by bureau telegram of May 16, amended so that said leave shall be for twenty-one days only.

Asst.-Surgeon Dunlop Moore, to proceed to Port Townsend, Wash., and assume temporary charge of service during absence of P. A. Surgeon C. H. Gardner.

A. A. Surgeon B. J. Brown, Jr., granted leave of absence for fourteen days from June 20.

A. A. Surgeon B. W. Goldsborough, granted leave of absence for two days.

Hospital Steward W. F. Schlaar, relieved from duty in the Hygienic Laboratory, and directed to proceed to Key West, Fla., and report to the medical officer in command for duty and assignment to quarters.

Hospital Steward E. B. Scott, granted leave of absence for twelve days from June 24.

Health Reports.

The following cases of smallpox, yellow fever, cholera and plague, have been reported to the Surgeon-General, U. S. Marine-Hospital Service, during the week ended June 22, 1901:

SMALLPOX—UNITED STATES AND INSULAR.

California: San Francisco, June 2-9, 1 case.
Florida: Key West, June 5, 1 case.
Illinois: Chicago, June 8-15, 4 cases.
Indiana: Evansville, June 8-15, 1 case; Michigan City, June 10-17, 2 cases; South Bend, June 8-15, 1 case.
Iowa: Clinton, June 8-15, 1 case.
Kansas: Wichita, June 8-15, 3 cases.
Kentucky: Lexington, June 8-15, 1 case.
Louisiana: New Orleans, June 8-15, 11 cases.
Massachusetts: June 8-15, Fall River, 1 case; New Bedford, 3 deaths; Worcester, 8 cases, 2 deaths.
Michigan: Detroit, June 8-15, 33 cases, 1 death; Sault Ste. Marie, June 16, prevalent.
Minnesota: Minneapolis, June 8-16, 17 cases; Winona, June 8-15, 1 case.
Missouri: St. Louis, June 2-9, 37 cases, 1 death.
Nebraska: Omaha, June 8-15, 12 cases.
New Hampshire: Manchester, June 8-15, 6 cases.
New Jersey: Jersey City, June 8-16, 2 cases; Newark, June 8-15, 3 cases; Plainfield, June 8-15, 1 case.
New York: New York, June 8-15, 102 cases, 11 deaths; Yonkers, June 7-14, 5 cases.
Ohio: Cincinnati, June 7-14, 5 cases; Cleveland, June 1-15, 45 cases; Dayton, June 8-15, 1 case; Toledo, June 8-15, 1 case.
Oregon: Portland, May 1-June 5, 23 cases.
Pennsylvania: Philadelphia, June 8-15, 3 cases, 1 death; Pittsburg, June 8-15, 2 cases.
Rhode Island: Providence, June 8-15, 3 cases.
Tennessee: Memphis, June 1-15, 26 cases, 2 deaths; Nashville, June 8-15, 1 case.
Utah: Salt Lake City, June 8-15, 9 cases.
Vermont: Rutland, June 8-15, 1 case.
Washington: Hoquiam, June 10, 1 case.
West Virginia: Wheeling, June 8-15, 1 case.
Wisconsin: Green Bay, June 8-16, 6 cases; Milwaukee, June 8-15, 3 cases, 1 death.
Philippines: Manila, April 20-May 11, 18 cases.

SMALLPOX—FOREIGN.

Austria: Prague, May 25-June 1, 4 cases.
Belgium: Antwerp, May 25-June 1, 2 cases.
Ceylon: Colombo, May 4-11, 5 deaths.
China: Hongkong, April 26-May 11, 5 cases, 2 deaths.
Colombia: Panama, June 3-10, 6 cases.
France: Paris, May 25-June 1, 10 deaths.
Gibraltar: May 24-June 2, 1 case.
Great Britain: Glasgow, June 1-7, 35 cases, 1 death; Liverpool, May 25, June 1, 2 cases; London, May 25-June 1, 1 case.
India: Bombay, May 14-21, 8 deaths; Calcutta, May 11-18, 31 deaths; Karachi, May 12-19, 4 cases, 2 deaths; Madras, May 4-17, 22 deaths.
Italy: Messina, May 25-June 1, 1 death; Naples, May 26-June 2, 169 cases, 30 deaths.
Russia: Moscow, May 18-25, 25 cases, 1 death; St. Petersburg, May 18-25, 15 cases; Warsaw, May 11-18, 4 deaths.
Spain: Corunna, May 25-June 1, 1 death.
Straits Settlements: Singapore, April 1-30, 3 deaths.
Switzerland: Geneva, May 18-25, 5 cases.
Syria: Beirut, May 18-25, a few cases.

YELLOW FEVER.

Cuba: Havana, June 1-8, 1 case.

CHOLERA.

India: Bombay, May 14-21, 3 deaths; Calcutta, May 11-18, 77 deaths; Madras, May 4-17, 6 deaths.

PLAGUE—INSULAR.

Philippines: Cavite, May 2, 1 case; Cebu, May 2, 1 case; Manila, April 20-May 11, 94 cases, 79 deaths; Santa Rosa, May 2, 1 case.

PLAGUE—FOREIGN.

Africa: Cape Town, May 4-18, 463 cases, 209 deaths.
China: Hongkong, April 27-May 11, 221 cases, 209 deaths.
India: Bombay, May 14-21, 224 deaths; Calcutta, May 11-18, 79 deaths; Karachi, May 12-19, 149 cases, 144 deaths.